

Research education for diversity in educational research

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Abstract. Concern, expressed by government and other funding agencies and consumers of research, about the quality and relevance of research in the field of education affects not only the kind of research is conducted but also the way in which we educate researchers. The economic imperative for ‘value for money’ from research and researchers has, for instance, led to the education of research students to be seen increasingly in terms of training in a range of generic skills that can be applied to the investigation of a range of forms of research problem in a variety of contexts. Whilst breadth in the education of researchers has clear advantages, both for the careers of individual researchers and the wider research community, there is some tension between this approach and the more established view of a research degree as an induction into a narrow domain of knowledge and the production of a highly specialised academic identity. There are further developments that erode this notion of specialisation, for instance the growth of mixed method research, which has the potential to challenge the polarisation of qualitative and quantitative research, and shifts in the sites and agents of educational research signified by the growth of professional doctorates, which could further challenge the university as a dominant institution in the production of educational knowledge. In this paper I will explore what these developments mean for the teaching of research and consider how we can work collaboratively to develop both professional researchers and researching professionals, and reconcile the acquisition of skills with induction into specialised knowledge domains. This will involve exploration of both an overarching framework for thinking about the processes of doing research and specific examples of practice. Underlying the approach taken is a general commitment to research education, rather than to training and the teaching of methods, and the desire to ensure dynamism and diversity in educational research, in terms of approach, substantive focus and theoretical orientation, and of sites, practices and agents of knowledge production.

Introduction

At the heart of this paper are a number of very practical concerns that relate to my professional work as a researcher in the field of education, as a writer and as a research educator. I am going to address a number of current issues in research education, but not solely for the purpose of debate and discussion. Ultimately I want

to be clear about what these developments mean for the manner in which we, as researchers and teachers of postgraduate students, approach the induction into research of people working, or intending to work, in education and related fields.

From the start it will be clear that I am purposely avoiding the terms ‘research training’ and ‘teaching of research methods’. Both of these terms, I feel, limit the scope and reduce the status of the activity of teaching people how to do research and supporting them in the development of their own work. Instead, I am using the term ‘research education’, to signify both that we are dealing with more than just the transmission and acquisition of a set of skills and that there are issues that transcend our own field of work and are of concern to those working in the teaching of research in other disciplines and fields. Here, we as educators have a unique contribution to make in that we are engaged both in the education of researchers in our own field and in researching the processes of education, and thus can provide a better understanding the processes by which people learn to do research.

It should also be clear that I am not restricting the discussion here to teaching research to people who intend to become academics and professional researchers in the field of education. I am particularly concerned to address how education professionals, whose engagement in and with research might be predominantly in the interests of professional development, learn to do research. With respect to this, it is important to recognise that the locus for the production of knowledge has moved away from universities and that, in information-oriented economies, there is a diversification of sites and agents of production of knowledge (see Gibbons *et al*, 1994; Scott *et al*, 2004). The status of the university as the dominant site for the production of knowledge, and in the regulation of what constitutes accepted practice for the production of knowledge in particular fields, is questionable. Increasingly, we have to think long and hard about the relationship between what we do in higher education and the educational practices in the contexts that we explore in our research and influence through our teaching. What exactly is our expertise, and how does this relate to the further development of research and practice?

In the first part of this paper, I will explore a range of contemporary issues in research education and consider their implications for practice. I will then go on to

consider how we are addressing these issues in the development of research education, both conceptually and practically.

The changing landscape of research education

In teaching postgraduate research students to do research in education and related fields, we are clearly not working in a vacuum. A variety of factors, both internal and external to the university, affect what we do and how we do it. There are, for instance, broadly *economic* factors acting to shape the landscape in which we, and our students, practise. This is evident in an international concern about the quality of research in education. In the UK there have been a number of critical commentaries on research in education, from various quarters, that have questioned the utility and quality of recent research, thus questioning the value of investment of resources in research (see, for instance, Hargreaves 1996, Tooley & Darby 1998, Woodhead 1998, Blunkett 2000). One of consequences of this questioning is the move to define what constitutes quality in research from the perspective of users of research, both in terms of outcomes (what kind of knowledge is useful) and processes (what kind of research can be viewed as trustworthy). Clearly this has a direct influence on both the content of research training courses and on the exemplars of ‘quality research’ that we present to our students. If we are thinking about the education of researchers as the induction into a community of practitioners, these kinds of concerns and responses affect both what people are being inducted into and how this happens. The practice of research in education is transformed (to reflect shifting criteria) as is the positioning of research in relation to practice in education (to reflect changing levels of confidence in the utility of research).

It would be a mistake to take an overly determinist perspective on this: we are considering influences here, albeit powerful ones. The very process of training of researchers, through doctorates and other postgraduate courses is, of course, a form of investment. Economic concerns are increasingly evident in the prescription of what it is, exactly, that students gain from studying for, say, a masters degree or doctorate. In the UK, the Economic and Social Research Council (ESRC), the government agency responsible for funding both research in the social sciences and doctoral and postgraduate education for researchers, has identified a set of generic skills that

someone with a doctorate in the social sciences should be expected to have. The generic skills listed in their research training guidelines (ESRC, 2005) have a strong professional orientation and include language, teaching, bibliographic and computing skills, as well as familiarity with legal, ethical and intellectual property rights issues. They further mark out a range of personal development and employment-related skills, such as of communication, management and team-working skills. The generic research skills cover the design, conduct and dissemination of research and include specific items on research design and the collection and analysis of data. Recognised courses, for which state studentships are available, must demonstrate how they enable students to acquire these skills. As well as having this array of generic skills, researchers also have to have a breadth of understanding a range of approaches to research. Within the confines of a doctoral or postgraduate programme, this demand for breadth, though clearly beneficial in terms of understanding of the field in which one is working, will impact on what is possible in terms of depth, and on what is achievable in terms of research. This is exacerbated by increasing pressures, motivated by a desire for 'value of money' and underwritten by university funding formulae, for students to complete in a tightly defined time frame (in the UK full-time doctoral students would be expected to complete in 3 to 4 years, part-time students in 5 to 7 years). This aspect of the 'research economy' has, as Bernstein (1996) has observed, direct impact on the kind of research that it is possible for students to carry out. The time required for the kind of extended and detailed engagement required for the rigorous analysis of qualitative data is, Bernstein argues, likely to deter students and supervisors from embarking on this kind of research. It should also be added that the uncertainty of the outcomes of such research, and thus the risk of delayed completion and thus financial penalty, are a further disincentive. These economically driven concerns, whilst understandable, clearly constrain research education in demanding both generic skills and breadth of understanding on the one hand whilst limiting what is possible for students to do in relation to their own research in a risk adverse and heavily regulated environment in which postgraduate research education is seen as being predominantly about the production of subsequent generations of researchers (an assumption which I will question later in this paper).

Concerns about the *governance* of research reinforce these effects. This is particularly manifest in need for institutions, rightly, to ensure ethical research

practice by staff and students. Whilst clearly of importance to all researchers working with people, debates relating to ethical practice in research in education have tended to offer fairly limited images of what constitutes research, and the regulatory guidelines produced steer us away from particular forms of research that are seen as being inherently or potentially risky. Research into, for instance, internet-based communities might not lend itself to the adoption of accepted practices in face-to-face research, such as gaining the informed consent of participants. The issue here is not whether or not there is a need for clear and transparent processes for ensuring ethical practice, but the extent to which the processes developed act to limit research practice and thus reduce the potential for innovation and constrain diversity. For postgraduate students, the risks associated in innovative research in new contexts might prove to be too great. This raises the question of where dynamism in the field is generated, and how this is fostered.

These economic and ethical imperatives interact with factors that relate to the discipline or *field* in which the research takes place and into which the student is being inducted. Although dominated in the past by the so-called foundation disciplines (sociology, psychology, philosophy and history), few students now come to research in education with a strong background in these areas. Progress to a doctoral programme is far less stringently regulated with respect to disciplinary background and specialised knowledge than it was, with greater emphasis now on the level of qualification achieved and the skills and dispositions that this brings with it (in line with the discourse of generic skills and level indicators). The field of education is certainly diverse and fragmented in terms of underlying assumptions, approaches to research and substantive focus and this, as Hammersley (2005) has pointed out, creates problems for teaching: how do we give students an understanding of this diverse range of ways of doing research. One approach, associated with the form of mixed methods research advocated by Tashakkori & Teddlie (2003) is to focus predominantly on the research question and, adopting a pragmatic perspective, selecting research methods on the basis of 'fitness for purpose'. This self-proclaimed 'dictatorship of the research question' (Tashakkori & Teddlie 2003: 65) brings with it the imposition of a pragmatic philosophical position and the rendering of research methods as a technical (and thus non-methodological) enterprise. A contrasting position is advocated by Furlong (2003), who accepts that there are diverse and

apparently irreconcilable approaches to research in education (he contrasts ‘relativist’ and ‘realist’ approaches, and broadly associates these with, respectively, humanist and scientific/engineering orientations to research) but calls for dialogue and mutual understanding. Both positions are problematic (see Brown, in press, for discussion).

The guidelines produced for research training, and much of the discussion of the skills and understandings needed by postgraduate research students in the field of education assumes that the intention of these students is to become professional researchers or academics. It is debatable whether, in the field of education, which has a strong relationship with practice and practitioners, this has ever been the case for the majority of research students, many of whom are education practitioners who wish to deepen their understanding and develop their practice through research. This has become even more pronounced with the development and growth of professional doctorates, such as the EdD. These programmes are designed for mid-career or senior education practitioners who wish to carry out research, usually in their own workplaces, that is rigorous and professionally relevant and that, through both the process of doing the research and the outcomes of the research, makes a direct contribution to professional knowledge and practice. The development of these programmes consolidates the increasing diversification of the *agents* of the production of knowledge, and the move towards the workplace and away from the university as the locus for this research consolidates a shift in the *sites* of the production of knowledge. There is a growth in professional doctorates in diverse fields of professional practice, and as the study of the fields of education, business and engineering by Scott *et al* (2004) has demonstrated, the form taken by these professional doctorate programmes and the manner in which the relationship between higher education and professional practice is realised varies from field to field. The relationship between research in education and educational practice, and the nature of the relationship between the university and the sites and agents of professional practice differ from those of business research and practice and engineering research and practice. This relates to both the nature of the field and relations within the field and the relationship between the discourse of the field and that about which statements are made. Not to put too finer point on it, what is unique about the field of education with respect to the education of researchers in education is that it produces principled general statements about the processes and practices of education. As

researchers in education and as educators we are in a unique position to realise, with respect to practice and the development of both academic and professional knowledge, the *pedagogic capital* of the university.

It is not only the 'what' and 'who' of research education that is in the process of transformation, but also the 'how' and 'where'. In assessing institutions for their suitability as 'outlets' for research training in the UK, the ESRC places great emphasis on the quality of the '*research culture*'. This relates to the volume and quality of research, the facilities offered in support of research and postgraduate research students and the existence of a critical mass of researchers and research students. The increasing importance of information and communication technology (ICT) in the constitution of communities, and the use of ICT by researchers in their everyday practice, raises questions about the prioritisation of physical location in the identification of membership of and participation in a research community. The use of synchronous and asynchronous online conferencing by researchers working in the same field enables the formation and maintenance of physically remote research communities, who are able to share ideas and resources and work together at a distance. In addition to participation in virtual research communities, researchers increasingly use online and other electronic resources that are not tied to a particular location or physical institution. We are thus in a position in which we should now be asking 'what is the value added by physical proximity?' rather than dwelling on what is lost through physical distance. As well as providing possibilities for the building of research communities at a distance, these technologies can also enrich existing physically located communities. They also carry *pedagogic* potential for research education. Greater flexibility and control can be given to research students in the acquisition of skills and the sharing of knowledge, for instance. Collaboration between institutions and individuals in the elaboration of workplace-based research and learning can be facilitated by the formation of virtual communities and through the use of online research resources. The technologies sharpen the need, as do the shifts in the sites and agents of knowledge production, of particular importance in knowledge-based economies, to be clear about what it is that universities have to offer to practitioners (and vice versa) in the production of both professionally relevant and academic knowledge. Academic discourses continue to offer an alternative perspective on practice; the development of professional doctorates indicates that this

supplement to professional subjectivity continues to be of value to practitioners, whilst signalling that a sharp division of labour between producers and consumers of knowledge is barely sustainable. The use of ICT continues to create new possibilities in the framing of this relationship as well as providing wider access to resources for research and the dissemination of research and practice through international virtual networks.

Responding to challenges and opportunities

The opportunities and challenges discussed briefly above signal both increasing complexity in the enterprise of educating researchers in the field of education and, through attempts to manage the risks this brings for the public status and understanding of research, the economic demand for good value and the perceived threat to the position of the university with respect to educational practice, moves to regulate and constrain research. The task of putting together a programme for the education of researchers, which meets the demand for breadth, rigour, relevance and transferability, is in itself hugely challenging, and courts the danger of becoming incoherent. On the one hand, the successive presentation of de-contextualised skills and unrelated perspectives is pedagogically barren and potentially alienating, as well as leading to an overloaded curriculum; on the other, the opportunity to develop a specific approach through a personal project fails to meet the need for diversity and mutual understanding of approaches. To meet these challenges a research education programme has to be able to encompass diversity whilst providing a means of engaging purposively and critically with these diverse perspectives and approaches, and with a range of research that exemplifies these approaches.

In our teaching and in our own research, Paul Dowling and I have presented research as a 'mode of interrogation for education' (Brown & Dowling, 1998). In doing this, we have attempted to develop a framework for the reading of research, which, in turn, becomes a mode for the interrogation, and thus development, of one's own research. It thus addresses both engaging with (reading) research and the processes of designing, conducting and disseminating (doing) research. The framework is intended to present a way on understanding the processes of social and educational research without demanding epistemological entrenchment. It acts to

provoke questions about, and an active engagement with, research and helps organise a critical account of both ones own work and that of others.

We make an initial division between the theoretical domain on one hand and the empirical domain on the other (see Brown & Dowling, 1998, p. 144). This is an arbitrary, not essential, separation that is justified by its productivity in conceptualising the process of research and the development of a constructive critical commentary on research. Research is conceived of as a dialogue between these two domains. On the theoretical side, the research problem is sharpened through a process of specialisation. A research question or problem can be productively positioned with respect to a wider theoretical field and, within this, a subset of research and other writing (its problematic) that has particular relevance to the problem. The specification of a problem can be seen as taking place in dialogue with the empirical domain. The problem relates to a particular empirical field (for instance, it might be concerned specifically with primary schooling, and within this the education of children with special educational needs) and within this decisions have to be made with respect to sampling (the selection of a particular site or sites for the research, the selection of particular instances or cases within this, and so forth) and methods of data collection and analysis. Decisions made here will also be shaped by ethical and by pragmatic issues (for instance, relating to access to data). For coherence to be established, these decisions have to be made, and justified, in dialogue with the theoretical domain. This framework offers a way of interrogating research that is diverse in both approach and substantive focus. It also offers a guide to the development of research. With respect to this, it is not suggested that all research develops by moving sequentially from the theoretical field towards the problem and the empirical field towards the findings. Frequently, for instance, professional researchers have a problem that is predefined for them, and are seeking to position, refine and operationalise this. Conversely, practitioner researchers often have a defined research setting (frequently their own workplace) and the beginnings of a research question (perhaps relating to some aspect of their own practice) that they are seeking to relate, refine and operationalise. What is of central importance in all cases is the establishment of a dialogue between the theoretical and the empirical.

This is not the place to elaborate this approach (see Brown & Dowling, 1998, for detailed discussion). The point here is to explore the manner in which this way of thinking about research can be used to address the challenges identified in the first part of the paper. The strength of the approach is that it motivates for transparency in the development, conduct and presentation of research. It also operates in such a way that it does not impose a particular epistemological position or methodological approach, and thus is not limited in its application to particular forms of research. Whatever position or approach is being adopted, the researcher has to make clear the relation between the theoretical and the empirical and demonstrate to the reader how specialisation of the theoretical and localisation of empirical have been achieved. This involves the justification and elaboration of the decisions that have been made, and entails the exploration of the consequences of these decisions.

In the process of research education, this mode of interrogation can act as an initial analytic language that can be applied in the critical reading, and discussion, of published research studies. In our own teaching of postgraduate research courses in education, we introduce students at the beginning of the programme to the interrogation of published research using our framework. If possible, we select the research to match the substantive interests of the group we are working with; for instance in our MA module on research and development in ICT in education we use research papers that deal specifically with the use of ICT in a range of formal and informal educational settings. For each session students read and make notes on one or more research papers and then, as part of the session, work collaboratively to develop a critical commentary on the papers. In the course of the module we focus on different aspects of the research process, selecting additional theoretical, methodological and methods reading relating to this. Through this process, students start to develop and deploy an analytic language, which they can use to unpick and interrogate research studies and thus reach a deeper understanding of the processes of doing research, and an appreciation of diverse approaches to research. Alongside this students work together on small-scale data collection and analysis activities and develop and refine ideas for their own research. This develops a productive dialogue between reading and doing research.

This kind of approach allows students access to and active engagement with a diverse range of forms of research. This avoids the curricularising of research education, which leads inevitably to content overload in an attempt to explicitly ‘teach’ a wide range of approaches. The integration of collection and analysis activities provides shared research experience and a context for critical and meaningful engagement with research practice. The ongoing development and discussion of each student’s own research provides a locus for the development of an analytic language, as well as the refinement of individual projects through individual reflection and collective discussion. Generic skills can be acquired through participation in the activities associated with the programme and though specialised input that can be integrated, in a meaningful way, into the programme or linked to it. For instance, the development of skills relating to literature searching can be made an integral part of the programme, and specialised input on, for example, search strategies and the use of online resources can be made available to students to support this. In this way we can avoid the de-contextualised teaching of skills, which brings with it the problem of deferral of the meaningful application of skills.

The approach advocated here also requires that we are clear about what we, in higher education, bring to the enterprise of facilitating research in a variety of contexts. What we are doing clearly involves a transformation of the perspectives of participants, but this does not entail the subjugation of professional knowledge to academic knowledge. To the contrary, the engagement of practitioners with academic discourse supplements their subjectivity, just as engagement with professional discourse supplements ours. As potential sites, and agents, of the production of knowledge multiply, clarity with respect to our own expertise becomes increasingly important. What kinds of practices are we adept in and to what extent are we providing access to the principles of our discourse to participants?

The use of virtual learning environments, synchronous and asynchronous conferencing and other internet-based resources create new pedagogic possibilities. In the International Leadership in Educational Technology (ILET) project we have explored, in practice, the possibility of the development of international communities of postgraduate research students (Brown & Davis, 2004). Building on this experience, activities and resources in development for the Institute of Education’s

online Master of Research (MRes) programme (due to begin in 2007) become integrated into to our face-to-face courses, and research education integrates with workplace-based learning and research. The potential for international students working online and at a distance to contribute to a collective research resource repository and to develop and share their own individual knowledge bases becomes a resource for students working together in London. In these and other ways the distinction between face-to-face and virtual research education become blurred. In a survey conducted as part of the development of the online MRes programme, it was found that the dominant mode of communication between supervisors and their research students was email, irrespective of whether they were full-time or part-time students, London based or working at a distance (Brown & Earle, 2004). Increasingly, reading material for face-to-face courses is distributed and accessed electronically, and face-to-face interaction is supplemented by online conferencing (and vice versa).

Conclusion

In this paper I have attempted to signal some of the shifts in research practice and research education that are acting to redefine and challenge both what we do as research educators and how we do it. In presenting one possible approach, I have attempted to resist the presentation of research education as a technical exercise involving the transmission and acquisition of a disparate range of skills, to be pragmatically deployed. The approach presented does value diversity in research at the levels of theory, methodology, design and method, whilst at the same time enabling students to develop a strong analytic language for the critical interrogation of their own developing research and research conducted by others. This approach also resists the prescription of a particular theoretical perspective, epistemological position or methodological approach. The stress placed on active engagement with research, and with other researchers, on the development of research communities and on dialogue fits well with the opportunities offered to research educators by the use of ICT, which I have illustrated briefly above.

I do wish to take the argument presented here a step further. The focus of the paper has been on the processes of research education for those who wish to carry out research in education and related fields, either as professional researchers and

academics or as researching professionals and education practitioners. In exploring how we might approach this I want to argue that, as researchers, academics and practitioners working in the field of education, we have a unique contribution to make in that, firstly, we bring an understanding of the processes and relations of learning and teaching and, secondly, and more importantly, the enterprise of interrogating the processes and products of research is an educational activity in itself, whatever the field of research. On this basis we have a strong claim to the inauguration of the field of 'research education', which is able to interrogate and illuminate the processes and practices of becoming a researcher across diverse domains of knowledge. We can, however, push this argument yet another step forward. The process of research, conceived in the manner presented here, is itself an educational activity, in that it transforms the way in which we understand the phenomena we are investigating, and thus it transforms us both as researchers and as practitioners. To meet the requirements of transparency and openness to critique that are fundamental to the approach being presented here, the research has to be mediated, to its diverse audiences, as pedagogic text in that it has to enable the reader to understand the principles and processes of the research and to engage them in critical dialogue. In these senses research, in all fields not just in education, can be seen as educational.

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