Engaging with the research methods curriculum

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Abstract

Training in research methods has always been an important part of postgraduate courses; however, in recent years, what constitutes an "appropriate" kind of training for postgraduate students in Education has been shaped by national policy in addition to disciplinary traditions. Such debates became a live issue during the process of developing an online research methods module for three related MA programmes. In this paper, a critique is developed of approaches to teaching research methods. This is achieved by exploring three different approaches to the teaching and assessment of an online research methods module. The differences between these are examined, drawing on the theoretical framework and the idea of the 'engaged curriculum' developed by Barnett & Coate (2005). The paper concludes by contrasting the diversity in this case with the position currently being advocated by the UK's funding councils.

Introduction

This paper we explore different ways of framing the research methods curriculum in Education, and identify the implications for teaching that follow from these. First, current approaches to research methods training are reviewed, with a particular focus on policies within the UK. Next, a theoretical model for describing curricula in Higher Education is presented. This is then used to frame three different proposals for the development of an online research methods module in education, funded as part of the PREEL pathfinder project, explaining their relative priorities. The consequences of these different priorities for teaching are identified. The paper concludes with a discussion of the implications of these different approaches for teaching research methods.

Background: teaching research methods in Education

It has long been argued that academic disciplines are shaped, in part, by the kind of claims that are recgonised within that tradition as ‘knowledge’ (Hirst, 1974). This renders learning about research methods particularly important in the formation of researchers’ professional identities, and goes a long way towards explaining the disciplinary debates that have arisen about the research methods curriculum.

This debate surfaces periodically within the field of Education. For example, the editors of a special edition of *Sociology* in 1981 devoted to the subject argued that there was a particular need to consider research methodology:

> because of its relative neglect in mainstream journals, the sense of crisis which prevails in its teaching, and the great variety of material taught under the rubric of ‘research methods’, ‘methods of social research,’ ‘social investigation’, ‘the methodology of social research.’ (Burgess and Bulmer, 1981, 477)

More recently within Education, a central feature in the debate has been the competing distinction that has arising between developing researchers to be "critical consumers" or to be "research practitioners". Winn, for example, has explored the value of getting students to "learn through doing" in the context of a course which where students' development takes place through participation in a research project (Winn, 1995).

Contestation about the most appropriate foundations on which to base this training also persist. A recent Educate project, for example, evaluated and developed online materials based on the use of video narratives for teaching research methods. The author notes that whilst the project team did not initially share their beliefs "about pedagogy, epistemologies or ontologies" these emerged during the production of the resource "and in a sense underpinned and framed the development of the resource" (Banks, 2006). She goes on to state that:

> The most challenging pedagogic issues that came out of the evaluation were those relating to how knowledge about educational research methods can be constructed and developed, the cognitive models used to develop that knowledge and issues related to scaffolding of knowledge. (Ibid)

These fundamental differences in have implications for what is taught within research methods training courses, but also how that teaching takes place. However, recently, these differences have been overshadowed by broader concerns about the nature of postgraduate work and the way in which students are prepared for their subsequent careers. The impact of the changing political context – including the influence of research council frameworks – on the design of research methods curricula is now an important topic for investitigation (see Burgess, 1996; Birbili, 2001). For example, the UK's Economic and Social Research Council (ESRC) has emphasised the use of research methods training to inculcate "transferable employment-related" research skills (ESRC, 2005) with the goal to produce researchers "able to understand and use research techniques appropriate to their subject area and conversant with approaches used by other social scientists" (ibid). Fundamentally, this changes the purpose of research methods training, away from enculturation into an academic discipline of knowledge creation and towards enculturation into work-based, industrial traditions. Amongst the claims made for this set of guidelines is that:

> They further emphasise the ability to apply rather than merely acquire skills and the importance of advanced training throughout doctoral training. Ultimately, they reinforce the message that training outcomes and not structures are what counts in the development of highly skilled, professional researchers. (ESRC, 2005: Foreword)

These shifting context and persisting debates call into question the function and form of research methods curricula. However, in order to analyse these, it is necessary first to consider theoretical developments relating to curricula in Higher Education.

Interpreting the curriculum in Higher Education

Barnett & Coate (2005) have argued that the curriculum is an under-explored aspect of Higher Education, and that the term is almost entirely absent from both policy and research. The idea of the curriculum, however, is present implicitly in policy making,

often (they argue) in a reductive form that emphasises generic skills development and economic benefits at the expense of more humanistic agendas. Their argument is that an 'engaged curriculum' is required: one that does not merely operated as a well-constructed system (cf. Biggs' notion of the aligned curriculum; 1999) but which invites what they describe as a transactional engagement, one in which individuals engage with each other (p123).

They propose that this engagement spans three elements: knowing, acting and being. These, they emphasise, are active elements; so for example what is important is now what students *know* (implying a closed, passive state) but in their "own engagements with knowledge – in other words, his or her *knowing*" (p48, emphasis in the original). Similarly, although 'acting' seems self-evident, they caution that "where curricula have been constructed in a fragmented way, with little integration […] the action domain can take on a performative character" (p105). Importantly, they also question the advocacy of 'generic' skills that has been prevalent since the Dearing report (p99-101), not least because it is often unclear what these skills are *for*, and thus hard to judge whether the curriculum is serving its purpose; they are also hard to distinguish from subject-based skills (because often, they are simply subject-based skills re-labelled so as to count towards a competency framework); and even when they are proposed to contribute to future employability, the links to jobs are often so vague as to be meaningless. They do, however, recognise the important role that professional skills (such as the professional accreditation required by particular professional bodies) can have in shaping curricula.

Being, they argue, is often neglected within curricula; and yet:

> Being is the most significant of the three dimensions in that without it the others cannot take off. A student cannot be expected to try to get on the inside of a discipline (with the arduousness that entails) and engage in challenging practical tasks unless the student has a firm self (a 'self-confidence'); curricula, properly framed, can assist the development of a firm self. (p164)

'Being', in this context, is related to forms of knowing and acting in the world.

> Students are able to take on or *unable* to take on certain kinds of knowing, given their dispositions; given the self. (p110)

By way of illustration, they contrast engineering students able to use mathematical models to frame and respond to problems with students who develop problem-solving approaches by working through lots of examples until they see a pattern and can apply it. Which kind of being is more valued is obviously open to debate, but their proposal is that these dispositions reflect an important difference in the way students *are* as a result of their studies.

With this three-part framework, they analyse different curricula to demonstrate the variations in emphasis that existing within different traditions. It is worth emphasising that curricula were all seen to bring in each of the three elements, but that relative importance of each element varied. They do not propose that every curriculum should consist of an equal weighting towards each element. However, although they suggest that each discipline will favour their own balance between these elements, they argue that the

relative neglect of 'being' is an important issue to address.

In the next section, these ideas will be used to analyse a case study, focusing on the different possibilities that were considered for the re-development of a module on Educational research methods.

Three approaches to teaching research methods in Education

The case context

A decision was taken to rationalise the teaching of research methods within a department of the Institute of Education, University of London. This led to the proposal that a new, online research methods module should be developed that could be taken by students from several different MA programmes. This work was undertaken as part of the PREEL (From Pedagogic Research to Embedded e-learning) project, funded as an e-learning Pathfinder Pilot Project by the Higher Education Academy. In the first instance, it drew together teaching staff from three existing MAs (in ICT in Education, Mathematics Education and Science Education), two of which already shared a research methods module, taught face-to-face.

As has been noted, the design of technology for education requires assumptions to be made explicit, a situation that can either lead to the development of shared understanding between different communities, or else to confusion and problems in the development process (Falconer, 2007). In this particular situation, the requirement to specify the kinds of activities and resources with which students would be expected to engage, particularly for formal assessment, highlighted different assumptions about the purpose of the module that had been hidden in earlier, less formal discussions. In all, three different possibilities arose, each of which would require the course to be implemented in a different manner; these are outlined in the following sections.

A practical approach to research methods

This approach, which drew on an existing face-to-face course that had run twice, was designed to prepare students to undertake empirical work. Sessions covered orienting topics such as the formulation of questions and the design of research projects, as well as introducing a series of research techniques including interviewing and observation. Materials from research methods texts describing these approaches were used for course readings. Guest speakers presented examples of empirical research to illustrate approaches, and students were given access to dissertations as examples of research work. The assessment took the form of a research proposal, proposing a topic and the methods through which it would be studied, typically linked to the dissertation that students would undertake.

This proposal was strong on students' acting; the sessions were designed to provide students with the opportunity to rehearse research skills, for example. Students were expected to know when to use these skills, and methodological concepts were introduced, but the practical emphasis locates this primarily as fostering acting. Whilst students were

also expected to develop critical skills in evaluating research during the course, as well as to develop an understanding of what it means to be an educator and researcher, the primary focus was on acting rather than engaging with forms of knowing or being.

Arguably, however, this version of the curriculum does not emphasise the development of new forms of being. The production of a dissertation proposal as an assignment is significant in shifting the focus away from knowing and being towards doing: it positions the work of the module as providing a means to an end. The 'end' is the successful completion of the Master's programme; where an identity is implied in this, it lies in the certification of an individual as a successful disciplinary educator. Students would, of course, be expected to operate as competent researchers when they undertook their dissertation and the sessions in this module provided an opportunity to rehearse the skills that are required for this. However, using Barnett & Coate's framework, there is a difference between acquiring the skills (acting) and having the disposition to engage with problems by using them (being).

A critical approach to research methods

An alternative approach that was considered focused on the development of students' critical skills. This drew from a face to face course that had run successfully for several years. This approach drew on the conceptualisation of the research process in Brown & Dowling (1998), which provided students with a methodological language that they were expected to master during the module and make use of in their assignments. Each session involved the introduction of a methodological area and the discussion of an 'object text' – an example of published empirical research used to initiate discussion of specific methodological issues and to provide an opportunity to develop critical perspectives towards reading research. The reading activities were supplemented by practical exercises such as conducting interviews or observations between sessions, for example in the home or school. Students were asked to bring notes from these tasks along to the next session – which in some cases involved transcribing data. Reflections on these experiences were then incorporated into class discussions.

The module was assessed by the production of a critical review of one of the object texts, which was expected to demonstrate students' ability to use the concepts introduced in the core text and advance a coherent argument about the extent to which the text had answered the questions that it had posed and justified these findings through the use of empirical evidence.

The emphasis within this approach on developing critical engagement locates this module primarily within the 'knowing' component of Barnett & Coate's framework. This reflects a concern with engaging with forms of knowing, and in appreciating the links between evidence and knowledge claims. However, the other two elements were also present, albeit to a smaller degree. Students' 'being' was developed primarily through the reflective discussions around practical experiences. Students' acting was developed through the tasks set between sessions.

A practice-based approach to research methods

The third approach considered for this development was originally conceived of as a way of reconciling the two previous approaches. This would involve emphasising students' development as researchers, requiring participants to reflect on actions. The curriculum would be oriented to the problems researchers face and the tasks they are required to undertake, but would emphasis the social context within which research is produced. Sessions would follow a problem-based approach (see e.g. Savin-Baden, 2000), in that they would involve setting students tasks designed to reflect one part of the research process, such as making sense of data or establishing an appropriate scope for a planned piece of research. Research texts – both 'how to' research methods materials and examples of empirical research – would be made available as resources to support this activity. Concepts and frameworks would be introduced in this manner, as well as practical methods. Discussions and peer support would be integral to these processes, allowing for commentary and peer review. Tutors would scaffold this formative process by acting as more able peers. Throughout the module, students would be directed to record their reflections through blogging, to provide them with an opportunity to rehearse the narrative construction of their identity as a researcher (cf. Holmes, 2000). The module would be assessed by portfolio, in which students would provide a commentary on their development as a researcher, supported by evidence drawn from the set tasks and their own reflective writing; its assessment would rest on the credibility of their claims, given their evidence, rather than on the degree to which they demonstrated particular skills. (In other words, a student who had struggled with the module and whose portfolio accurately reflected this would be marked positively, whereas a student who clearly under-assessed their ability would be marked less favourably.)

Focusing the assessment on identity work, rather than on the implementation of skills or critique, defers judgement of these competencies. Instead, the module would serve a formative role, and the degree to which the student was able to engage critically and to implement research methods in an appropriate manner would be assessed through their performance on the Dissertation and other empirical modules.

The social construction of a 'researcher' identity within this approach emphasises the 'being' elements of Barnett & Coate's curriculum model. Students are expected to think of themselves *as* researchers, and to relate to their peers in this way too, through processes of peer review. Practical action and the development of forms of knowing would be required in order to achieve this, but are positioned as means to an end rather than the primary concern of the module.

Conclusions

As has been recognised, designing technology to support learning often requires assumptions to be made explicit. In the case study described here, this became visible in the way that assumptions about how the research methods curriculum ought to be taught were reflected in different possible course designs.

The three different approaches to teaching the research methods curriculum that arose in

the context of this case study all have coherence and internal integrity; however, each emphasises a distinctive set of values and priorities. They can be seen to reflect the contestation that has been endemic in this area, particularly the debate between developing researchers as critical consumers or practitioners, and the importance of orienting either to disciplinary or employment-related practices as a primary point of reference.

Barnett & Coates' framework has proved helpful in highlighting these differences. The relative emphasis on action within first approach echoes the emphases within the ESRC guidelines (2005) on developing students so that they are competent users of research methods skills. However, the two other approaches demonstrate that the other qualities – understanding and being – are also viable as an organising principle for research methods curricula.

Thus the analysis here suggests that the ESRC's claim that the structures of training 'do not count' in the development of researchers is misleading. The pedagogies outlined above reflect the values and priorities of the different conceptions of the research methods curriculum; moreover, they demonstrate that an action-oriented approach, far from being the inevitable 'best' approach, is a deliberate valuing of action over forms of understanding or being. This is not the only choice nor – according to Barnett & Coate – does its emphasis on generic and transferable skills and its desire to cultivate students who will enact skills in a competent manner, make the most sense. Alternatives need to be considered, including (as Barnett & Coate advocate) support for the development of new forms of 'being' for students who are becoming researchers.

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