Some preliminaries to action research with mature students

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Abstract

Since the report of the National Committee of Inquiry into Higher education (1997) on university teaching in the UK, there has been increasing emphasis on the professionalisation of university teaching. Following the expansion of higher education, and widening student diversity there is even more of a need for teachers to teach well. Pedagogical action research with its emphasis on improving practice is one way to meet this need. In this paper we report on research with mature students where the findings from over 40 British research studies suggest that: 1. Understanding the experience of mature students in higher education is an area that lecturers could usefully explore using an action research framework; and 2. Psychologists are particularly well placed to carry out such research with their theoretical understandings and research skills.

Introduction

In this paper we discuss the philosophy of action research, review the literature on mature students and use it as an example of how psychologists might wish to adapt the broad framework of an action research model to straddle the theory versus practice divide.

Action research in higher education

Research carried out by practitioners to improve their practice is at the heart of what is meant by action research (Zuber-Skerritt, 1992a). In the context of higher education, this means pedagogical research being carried out by lecturers on their own teaching and assessment practices and on

their students' learning. The advantage of lecturers, rather than educational researchers or staff developers, doing pedagogical research is that it enables them to reflect and then to act on their discoveries in a spiral process of planning, fact-finding and execution as originally described by Lewin (1946). Subsequent descriptions have referred to Kolb's (1984) learning cycles, and Zuber-Skerrittt's (1992a) CRASP model (**C**ritical, **R**eflective, **A**ccountable, **S**elf-evaluating and **P**articipative) The commonality in all these descriptions is a characterisation of action research as:

'a form of self-reflective enquiry undertaken by participants in social situations in order to improve the rationality and justice of their own practices, their understanding of these

practices, and the situations in which the practices are carried out' (Carr & Kemmis, 1986, p.162).

Action research can, therefore, directly impact on the teaching and learning context, much faster than theoretical research which often has limited impact on actual practice and policy making. It is over half a century since Lewin (1946) argued that theory and knowledge must improve practice in order to be useful, so why does this not happen more often in higher education today? One reason has been put forward by Zuber-Skerritt (1992b) who suggests that dividing educational theory and practice, where educational researchers focus on the former and lecturers on the latter, has resulted in an unhelpful estrangement between theory and practice and ineffective communication between the two.

Action research has had an uneasy history coming as it does between pure research and applied research. Worse still, action research on their own teaching may well strike some psychologists as not 'proper' research at all. The rest of this paper puts the case for high quality action research which is underpinned by theoretical understandings and a careful consideration of appropriate methodologies.

The research on mature students
In this paper we want to discuss the British research on mature students in order to consider its implications for action research. Currently it appears that this research is conducted almost equally between researchers who follow a quantitative disposition and those who follow a qualitative one (Hartley, 2001). Furthermore, it appears that the practitioners in each of these two separate camps make virtually no reference to the researchers in the other one. Our conclusions are that such isolation is unhelpful: researchers need to use complementary methodologies to obtain a more complete picture.

First of all, however, we need to note the portmanteau definitions of 'mature students'. Here are some that have been used in the research discussed in this paper. Mature students have been defined as: students who are over 21 who are admitted to undergraduate courses (e.g. Richardson, 1997); students who are over 23 (Lucas & Ward, 1985); students who are over 21 who can be classified in different groups: e.g. 'borderline mature' (21–25) and 'older mature' (25 years +) (e.g. Trueman & Hartley, 1996); students aged 25 and older (e.g. McDevitt, Sheehan & McMenamin, 1991); students aged 26–34 (Karach, 1992); and students aged 35–45 and 46–64 (Thacker & Novak, 1991).

Such limited and over-inclusive definitions make it difficult to draw clear distinctions and, no doubt as a consequence of this, we too shall be making some over-generalisations in this paper. Readers hardly need to be reminded, of course, that all students differ in their experiences and backgrounds, whether or not they are nature or traditional, and that these differences may be more important than simply their age in years (see below).

In the 1970s and 80s, when the number of mature students was relatively small, there was a concern about how well such 'non-traditional' students would perform academically compared with 'traditional' ones – those who came straight from school aged 18, with three or more various 'A' Level qualifications. Indeed, it was commonplace to think that such mature students would have particular and individual problems that were not experienced by the traditional ones. The research questions at that time were thus concerned with how well such students did relative to traditional entry ones in terms of academic performance, how much they differed in their experiences and problems from those of traditional students, and how well they overcame these problems.

The academic performance of mature students in the UK

From the 1970s to the present day a series of studies in the UK have reported on what we call the 'bottom-line' data – the final degree qualifications of different groups of students. These studies have thus compared the examination performance of mature and traditional entry students in a variety of different settings in order to see how well mature students did at university and college. There were local studies, where the performance in one institution (and often one subject discipline) was assessed, and there were national studies, where overall results across the system were compared. The results from one such local study are shown in Table I as an example. In this study the degree classes of 324 mature students graduating over a 12-year period at Keele University were compared with those obtained by 324 traditional entry students matched in terms of their sex and subjects studied. The results speak for themselves: the similarity of the two distributions is remarkable.

The results of 20 such 'bottom-line' local and national studies have been summarised elsewhere (Hartley, 2001). Most of these were completed before the re-classification of 'polytechnics' as 'universities', and before the introduction of semesters and modularisation (all about 1993–1994).

Our broad conclusions about these 20 studies are as follows:

- Mature students usually performed as well as, or better, than younger ones in the smaller, local studies.
- The broader national studies showed that overall results were sometimes affected by the nature of the discipline, with most students, mature or otherwise, doing better in the arts and social sciences than in the sciences (e.g. see Walker, 1975; Woodley, 1984; Richardson & Woodley, 2001).
- There were sometimes sex differences in the results in both the local and the national studies, but these were not wholly consistent: often mature women seemed to do better than mature men, but this was not always the case (e.g. see Woodley, 1984; Lucas & Ward, 1985; Newstead *et al.*, 1997; Richardson & Woodley, 2001).
- There were sometimes age differences in the results, with older mature students doing better than younger mature ones (e.g. see Woodley, 1984). but again this was not always the case. Richardson & Woodley (2001) found in a large national study that performance declined after the age of 50.
- Not all of the studies controlled for or took into account the background qualifications of both groups of students.

Table 1. The distribution of the degree classes for 324 traditional-entry and 324 mature students matched in terms of sex and subjects studied at Keele University from 1978–1990. (Data from Hartley, Trueman & Lapping, 1997.)

| | Degree Class | | | | | |
	1st	2:1	2:2	3rd	Pass	Fail
Traditional students	16	124	151	26	6	1
Mature students	16	122	139	36	10	1

Basically one needs *before* and *after* measures for both groups to see if their performance is equal or different.

- Issues of social class and ethnicity were almost totally ignored.
- Most value – in our view – can be placed upon the findings of the more recent local studies, and the larger national ones (e.g. Richardson & Woodley, 2001). However, we need to remember that in the national studies, the results obtained from different disciplines and different institutions are combined.

In addition to these 'bottom-line' studies a number of other British studies helped to dispel the myth of the mature student experiencing particular difficulties. These studies showed that mature students performed better than traditional ones on measures of: deep learning (Richardson, 1997; Sutherland, 1999); time-management (Trueman & Hartley, 1996); reasons for studying (Newstead *et al.*, 1997); motivation (Newstead *et al.*, 1997); honesty/cheating (Newstead *et al.*, 1997).

However, we should note that the drop-out rates of the older mature students are often slightly higher than those of traditional entry students (e.g. see Woodley, 1984; Newstead *et al.*, 1997). In the US similar studies have shown that mature students have: different listening skills (McDevitt, Sheehan & McMenamin, 1991); more intrinsic motivation and self-direction (Sheehan, McMenamin & McDevitt, 1992); and less apprehension about speaking in class (Poppenga & Prisbell, 1996).

The experiences of older learners

The 'bottom-line' studies concentrated mainly on final degree performance, and used quantitative methods in doing so. However, solely concentrating on the 'bottom-line' did not help teachers, administrators and students learn much about the qualitative differences between students – mature or otherwise (apart from helping to dispel the myth that mature students

perform less well than traditional ones). However, we all know that individual students may arrive at the same final degree class by a variety of routes, and simply comparing their degree results will not enable us to differentiate between students with different background experiences. And there is no doubt that the individual experiences of mature (and traditional) students are very different (e.g. see Edwards, 1993; Pascall & Cox, 1993; Britton & Baxter, 1994; Merrill, 1999; Hall & May, 2001).

Five different kinds of data collection have been used to examine the experience of mature students. There have been studies that: solely utilised questionnaires (e.g. Norton *et al.*, 1996); supplemented data obtained from questionnaires with that from interviews (e.g. Webb *et al.*, 1994); relied solely on interviews (e.g. Merrill, 1999); provided case-history accounts (e.g. Arksey, Marchant & Simmill, 1994); and that supplemented data from interviews with case-history accounts (e.g. Beaty, Dall'Alba & Marton, 1997).

Sometimes these studies have provided simple summary accounts (for example, providing the percentages responding to different questions) but, on other occasions, the data have been subjected to more detailed qualitative analyses, leading to different thematic interpretations (e.g. see Edwards, 1993; Merrill, 1999).

Our summary observations of 26 studies in this respect (see Hartley, 2001) are as follows:

- Nearly all of these studies have appeared since 1990, suggesting a change of emphasis from the earlier research discussed above. This follows a more positive approach to qualitative research in education and the social sciences generally.
- Only two early British studies (Nisbet & Welsh, 1972; Phillips, 1986) and one later one (Norton *et al.*, 1996) have utilised solely questionnaires in this context.
- Only one of the 26 studies (Marshall &

Nicholson, 1991) utilised a comparison group of traditional entry students. (It would seem that mature students are still seen as different and, as a consequence, nothing is known about the comparative experiences of mature and traditional students.)

- Only two studies (Marshall & Nicholson, 1991; Ashcroft & Peacock, 1993) combined 'bottom-line' and experiential data – even though some of the interview studies were retrospective ones. (Thus we know nothing about the comparative experiences of students with 'good' and 'poor' degrees.)
- Eight studies out of the 26 examined only the experiences of women mature students. (No studies restricted themselves solely to men.)
- There was some indication that women students who were pregnant or who had young children (and also men with families) had especially difficulties (Edwards, 1993; Wilson, 1997; Norton *et al.*, 1998; Duncan, 2000).
- There was evidence that mature students had different reasons for studying compared with traditional ones (e.g. see Beaty, Dall'Alba & Marton, 1997). Mature students were more likely to focus on personal reasons for studying whereas traditional students were more likely to focus on vocational concerns (Beaty, Gibbs & Morgan, 1997).
- Issues of social class and ethnicity were considered in some studies, but not especially so.
- Most value – in our view – can be placed on the more detailed, full-length studies (e.g. Edwards, 1993; Merrill, 1999).

The performance and experience of Access students at University

Another related area of interest in the UK is how well 'Access' students perform in higher education. Access students are students – usually mature ones –who enter higher education with few or no traditional-entry qualifications after successfully completing various specially devised one- or two-year Access courses. (In Australia, 'TAFE' students, i.e. those following courses in Technical and Further Education and then entering the university system, provide an interesting parallel.)

The research on Access students in the UK follows much the same pattern as the research on mature students, but there is less of it. Again there are local and national studies of their 'bottom-line' performance although the majority of them are local ones (see Hartley, 2001). These studies of the performance of Access students suggest that they tend to do as well as traditional students but the data are, sometimes, a bit vague in this respect. Leopold and Osborne (1996), for example, reported that for 12 Access students their performance was 'similar to performance in the University (of Stirling) as a whole'. Furthermore, in these Access studies the 'bottom-line' is sometimes the performance at the end of the first-year rather than at the end of a three- or four-year period. Other studies also compare drop-out rates (e.g. Capizzi, 1996). And sometimes the available data are just not reported. Langridge (1993), for example, makes – what is to us – the remarkable statement that:

'Performance indicators such as the class of degree achieved are crude ways of measuring student performance. They leave many aspects of the experience of students to be revealed by other means. In order to gain a more meaningful insight into student experience, students (n = 25) were asked for their own assessment of their performance in higher education' (p.256).

The degree classifications of these students (which the author must have known or easily found out about) are never mentioned. Langridge is not alone in doing this but it is not usually so obvious. We think it regrettable because an important feature of some recent studies is that they suggest that Access students need to have

good Access qualifications in order to succeed in higher education (e.g. Gull, 2000).

There are also separate studies of the experiences of Access students and their approaches to studying (see Hayes, King & Richardson, 1997; Hartley, 2001). Of these qualitative studies perhaps the one by Betts (1999) is the most detailed, using survey responses from over 100 students and interview data from 67. Betts concludes that the journey from Access to higher education never runs smoothly, but that it is much easier for men than it is for women.

Implications for action research

This review of the literature suggests that the case of mature students is one that psychology lecturers could usefully explore further using an action research approach. The usual action research frameworks (see for example, Lewin 1946; Kolb, 1984; Carr & Kemmis, 1987; Zuber-Skerrittt, 1992a; Latham & Gilbert, 1995) have been simplified by Norton (2001) into a five stage cyclical process encapsulated in the acronym ITDEM where the stages are **I**dentifying a problem in your practice; **T**hinking of ways to tackle it; **D**oing it; **E**valuating it and **M**odifying your practice. Given the specialist research skills of psychologists, the ITDEM process could be adapted by taking a more traditional research approach which means: (i) incorporating a review of the relevant literature; and (ii) making an informed decision on the appropriate methodology to use. This is what we mean by 'the preliminaries' in the title of this paper. The following is an illustration of how such an adaptation might work:

Aim
To identify particular concerns of men and women mature students with a view to assessing (i) if they are different from those of traditional entry ones and (ii) what institutions/departments might do to aid their students' academic progress.

This is a different starting point from the usual action research cycle which typically begins with the identification of a practice problem. In terms of pedagogical research, such a problem would be seen in the practical context of the learning/teaching situation and what a lecturer would need to know to improve matters. The more general aim, elucidated above, bridges the gap between action research and more theoretical research. It is framed in a way that psychologists are familiar with and it presupposes that findings from the research literature will inform the decision making process.

Identifying the problem(s) arising out of previous research
Using the ITDEM framework, 'Identifying a problem' would be narrowly focused on what a lecturer had observed in her/his teaching of mature students and how they learn. An example might be a concern that mature students are finding the transition to Higher Education from Access difficult. (The literature reviewed in this paper has suggested that this might well be an issue for lecturers to explore further. See, for example, Betts 1999; Falchikov, 1995, on presentations, and McGivney, 1996, on student withdrawals.)

It is suggested here that using this 'problem', a more theoretically-based approach would be for the psychology action researcher to address some of the limitations discussed in the research reviewed above. In particular, studies need to be considered that: do not restrict themselves to one particular research paradigm; contain both traditional and mature students; group students into different age-bands, e.g. 18–24, 30–40, and over 45 years; attempt to control for, or at least take into account, background factors; examine different students' motivations for studying; and contain men and women respondents.

Again this modification would ensure a sound methodological base for the research

and thus serve a double aim of contributing to the theoretical understandings of mature students in higher education while at the same time designing a study that will be rigorous enough to produce empirical evidence to inform convincingly any adaptation of the teaching/learning context. This is particularly important given the nature of action research which is to involve other practitioners progressively in carrying out their own research and contributing to the overall research project and improvement of practice (Carr & Kemmis, 1986). If other lecturers are to be involved, they need to be convinced that the research is sound and well executed. One of the limitations of action research is that it operates at the level of the individual researcher/lecturer so any findings have only a limited impact such as on the individual's teaching, or in some cases, a group of enthusiastic colleagues.

Mortimore (2000) in his presidential address to the British Educational Research Association (BERA) made an eloquent plea for quality research to be carried out and disseminated in an accessible form for politicians and other policy makers. To involve entire departments, institutions and policy making at the highest level, pedagogical action research needs to be beyond reproach.

Having taken account of the preliminaries, the rest of the ITDEM process could be used straightforwardly without adaptation, so will not be further elucidated here. To summarise, the research findings on mature students have been used in this paper to put forward a case for psychology lecturers engaging in action research that will not only inform their own practice but, being theoretically based and empirically sound, can be used to influence policy making at departmental level, at institutional level and beyond.

Acknowledgements

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