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Review of widening participation research: addressing the barriers to participation in higher education

A report to HEFCE by the University of York, Higher Education Academy and Institute for Access Studies

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1. Introduction and overview

Summary

There are inequalities in participation in post-compulsory education and training by socio-economic status, gender and ethnicity, among other characteristics. These surface inequalities are largely reproduced in higher education, although there is no clear dataset available to substantiate this. To establish that a particular social group is under-represented in higher education (HE) we need to be able to define the group unambiguously, know the prevalence of that social group in the relevant population, and in HE, and be able to combine these and other elements – such as changes over time – appropriately. Limitations in the available datasets encourage analysts to focus on new, young and full-time students and to ignore non-participants completely.

The metaphor of ‘barriers’ to participation is an attractive one that suggests an explanation for differences in patterns of participation between socio-economic groups and contains its own solution – removal of the barriers. Research suggests that there are three types of barriers:

- *Situational – such as direct and indirect costs, loss or lack of time, and distance from a learning opportunity, created by an individual’s personal circumstances.*
- *Institutional barriers – such as admissions procedures, timing and scale of provision, and general lack of institutional flexibility, created by the structure of available opportunities.*
- *Dispositional barriers, in the form of an individual’s motivation and attitudes to learning, which may be caused by a lack of suitable learning opportunities (e.g. for leisure or informally), or poor previous educational experiences.*

A large body of research since the 1950s has found that the determinants of participation, and non-participation, are long-term. There is a clear pattern of typical learning ‘trajectories’ which are both shaped by, and constrain, learning experiences. Thus, the key social determinants predicating lifelong participation in learning involve time, place, gender, family, and initial schooling. Such findings emphasise the importance of reviewing evidence on participation through the ‘lifecourse’ of each individual, and compromises the analytic utility of the ‘barriers’ metaphor.

This section forms the start of a review of evidence on the barriers to widening participation (WP) in higher education in England. The section looks at the nature of the review, the established patterns of participation in education and training, and considers the notion of ‘barriers’ to participation.

In 2004, the Higher Education Funding Council for England (HEFCE) commissioned this team from the Universities of York and Staffordshire and from the Higher Education Academy to conduct an independent review of the existing relevant evidence on widening participation in HE, with particular reference to the varied barriers faced by potential and actual students. Our approach was to try to understand the barriers to participation experienced by potential learners within a lifelong model.

In Phase One, running from October 2004 to April 2005, the researchers located and catalogued as much evidence as possible, including both published and previously unpublished material. The chief outcome from this phase is a database of references to the body of evidence. This database is available for use by interested readers and researchers on the website:

<http://www.york.ac.uk/depts/educ/equity/barriers.htm>.

In Phase Two, running from February 2005 to September 2005, the researchers assessed the quality and direct relevance of this evidence, and synthesised it in response to a number of questions and policy areas. The chief outcome of this phase is the following review of evidence.

It is important for readers to consider the following cautions when using this review of evidence:

- The call for evidence was distributed widely, and wide-ranging searches were conducted. Nevertheless, our database of potential evidence is only as comprehensive as these search and collection methods allowed, within the time available.
- In general, anything that was not available or not made available to the reviewers by April 2005 is not included.
- Not all of the reports in the database are cited in the review. In some cases, there is more than one report based on the same or similar evidence, and in others no relevant evidence was found for the topics we reviewed in detail.
- In using any report, we have not necessarily reviewed all of the evidence, arguments or conclusions within it.
- The resources allocated to this review in relation to its scope, and the lack of precise research questions, mean that it was not possible to conduct a series of formal 'systematic' reviews.
- In covering a great deal of ground, the review is necessarily varied in the level of detail. The approach taken for each section of the review depends, to a large extent, on the range and quality of the reports available to us, and partly on our judgement of the strategic importance of each life stage.
- In taking a lifelong view of the route to and from participation the review could, in principle, consider all research in education, and much from the humanities and social sciences. This is clearly not possible, and so the review of evidence not directly addressing HE is necessarily less comprehensive.
- The focus of the review is on recent and future provision in England. Powerful work from other times and places is used as we judge appropriate.
- An appropriately sceptical approach has been attempted throughout and with each report, irrespective of its source, methods, and purpose.
- The reviewers were not able to analyse or re-analyse any of the data presented in evidence for the purposes of this project. Therefore, standard caveats apply, especially in the presentation of numeric patterns.
- Where we identify 'gaps' in research in the review, these claims are made in relation to the database as searched, supplemented by our own expertise.

1.1 Patterns of participation

1.1.1 Education and training

Inequalities in participation in all forms of post-compulsory education have endured over the past fifty years in the UK with significant minorities routinely excluded (e.g. Beinart and Smith 1998). Over a third of the adult population have not engaged in any learning at all since reaching school-leaving age (Gorard and Rees 2002, NIACE 2003). Those individuals who do participate in post-compulsory education are heavily patterned by 'pre-adult' social, geographic and historical factors such as socio-economic status, year of birth and type of school attended. Insofar as it is possible for there to be facts in social policy, these inequalities are fact. They are attested to by all relevant research studies, using whatever approach, over decades (Sargant and Aldridge 2002). Participation in post-compulsory education and training opportunities in England has long been markedly differentiated in terms of socio-economic groups (Bynner 1992, Marsh and Blackburn 1992). Sargant (2000) points out that a number of large-scale studies such as those from Glass (1954) to Gorard et al. (1999a) have shown these patterns and that the determinants of participation, far from being easily fixable, are long-term, and rooted in family, locality and history. The situation is the same or worse across the EU (European Group for Research on Equity in Educational Systems 2003). Indeed, some of the most recent figures suggest that these patterns of exclusion are growing:

'Fewer than a fifth of adults say they are doing some sort of learning, the lowest figure since before Labour took office in 1997 ... Social class appears to be a significant factor in the trend ... the decline in participation has been marked among people from the poorest backgrounds' (Kingston 2004, p.15).

As well as the socio-economically disadvantaged we know that those currently 'disenfranchised' from formal and non-formal adult education and training (the non-learners) also continue to be more frequently not employed, older, with lower literacy skills or with negative attitudes to institutional learning. In general, individuals from families with less prestigious occupational backgrounds, with lower incomes, the unemployed or economically inactive, the elderly, severely disabled people, and ex-offenders, are less likely than average to participate in any episodes of formal education or training after the age of 16 (Pettigrew et al. 1989, DfEE 1995).

Recent work has also emphasised the role of regional influences in determining patterns of participation (Selwyn et al. 2005). Because the individual characteristics underlying these patterns of participation are not evenly distributed across space, participation is also patterned by place of residence, leading to different rates of participation in different areas and regions of England (HEFCE 2005). These inequalities are perpetuated by the fact that those who participate and benefit most from adult learning tend to be those who have higher educational attainment levels already, and then continue learning throughout their life (OECD 2003). Those who are already better educated or qualified, and presumably more likely to be employed and at a higher grade, are also more likely to receive later training, perhaps because their previous educational record is seen as providing evidence of their being trainable (Banks et al. 1992, McGivney 1993). In one study, only 3% of those who left school at the minimum age reported undertaking any education or training in the prior three

years, compared to 65% of those with some level of immediate post-initial education (Park 1994).

This means that post-compulsory participation becomes a lifelong pattern for some, while non-participation becomes an alternative lifelong pattern for others, which is a complication for the dominant policy interpretation of the determinants of participation in terms of the individual's calculation of the net economic benefits to be derived from education and training, as proposed within human capital theory (Becker 1975). The reality is more complex than this (Gambetta 1987, Fevre et al. 1999).

1.1.2 Participation in HE

The differentiated patterns of participation outlined above appear across all sectors of post-compulsory education and training, including HE. HE is defined by HEFCE (in the glossary on its website) as follows:

‘Higher education courses are programmes leading to qualifications, or credits which can be counted towards qualifications, which are above the standard of GCE A-levels or National Vocational Qualification (NVQ) Level 3. They include degree courses, postgraduate courses and Higher National Diplomas. Higher education takes place in universities and higher education colleges, and in some further education colleges’.

Similarly, Wikipedia defines HE as: ‘education provided by universities and other institutions that award academic degrees’, but adds that ‘most professional education is included within higher education, and many postgraduate qualifications are strongly vocationally or professionally oriented’.

Government policy at the time of writing is to increase HE participation in England to 50% of those aged between 18 and 30, by 2010, and to use this to increase participation for those groups currently under-represented, especially from low-income families and low-participation areas. Originally, this 50% target was expressed as the sum of the percentages of students entering HE for the first time (Prospects 2002), where HE was defined as ‘all courses of one year or more, above A-level and its equivalents, that lead to a qualification awarded by higher education institutions or widely recognised national awarding bodies’. Prospects (2005) notes that the target has been changed to refer to those still in HE after six months, and that not much progress has yet been made towards either version.

The widening (as distinct from merely ‘increasing’) participation agenda is predicated on the notion that particular social groups, defined perhaps by social class or ethnic background, are unfairly under-represented in higher education. However, unlike the patterns in lifelong learning more generally, it is not clear that this unfair under-representation has been established, and for a very simple reason. Taking post-compulsory education and training as a totality, there are, in theory, opportunities of some sort available to the entire adult population. These include library drop-in centres, free basic-skills provision, job-seeker training, liberal evening classes, and courses delivered entirely by technologies such as television or computer. Therefore, the continued under-representation of certain groups in these objectively open episodes suggests a pervading problem of subjective awareness of opportunities

(Gorard and Rees 2002). HE, defined as above by HEFCE as a post-A-level learning opportunity, is somewhat different. HE is not intended to be available to all and is, to a large extent, based on selective entry in a way in which other lifelong educational opportunities are not. The majority of first places at HE institutions in England are allocated on the basis of applicants' prior qualifications. Therefore, we currently need to consider how these prior qualifications are generated and how other entry requirements are met. If these prior qualifications are distributed unfairly then this both explains the patterns of participation in HE and also suggests that using prior qualifications in this way is unfair (see Section 9).

1.2 Barriers to participation in education

A successful learning society is one in which everyone obtains high-quality general education, leading to a comprehensive post-school education and training system in which everyone has access to suitable opportunities for lifelong learning, including a university within reach of everyone (Coffield 1997). Within this society, provision of education should be both excellent and fair leading to individual learning, national economic prosperity and social integration (Quicke 1997). Mass participation in such a system is seen by some as necessary to provide a fulfilled life for individuals, a successful and developing economy, and a genuinely participative democracy (NIACE 1994), while equal opportunities in learning are a precursor to equality of opportunity in employment and citizenship (FEU 1993). Although it remains a disputed notion, this is a fair summary of what the 'learning society' is deemed to be in British official discourse (Brown and Lauder 1996, Otterson 2004). To the extent that participation in learning opportunities depends upon the actions of individuals the official model is based upon a rather simple application of human capital theory (Coffield 1999). Individuals are considered to participate in lifelong learning according to their calculation of the net economic benefits to be derived from education and training (Becker 1975). This leaves two principal issues which government policy is required to address. Firstly, the removal of the impediments or 'barriers' which prevent those people from participating in education who would benefit from doing so. Secondly, given that an individual's participation in education brings about benefits to society as a whole, ensuring that these benefits are internalised into each individual's decision-making. Points such as these have been made repeatedly since 1997 in a succession of official and semi-official reports (Dearing 1997, Fryer 1997, Department for Trade and Industry 1998, Kennedy 1997, National Audit Office 2002).

The metaphor of 'barriers' to participation is an attractive one that apparently explains differences in patterns of participation between socio-economic groups, and also contains its own solution – removal of the barriers. So, if it is observed that participation in HE is costly and that potential students from lower income families have lower rates of participation then it can be hypothesised that cost is a barrier, and removal of cost a solution, to widening participation. In this part of the review, we suggest some potential barriers that could be producing the existing patterns in participation. In the next part, we review some of the evidence on what happens to participation when barriers are removed. The focus of the review is on HE, but much of the prior research is based on the same metaphor of 'barriers' applied to all post-

compulsory education and training, and it is the latter which appears when searches are conducted involving the term 'barriers'.

Research has suggested several barriers that potential learners face, and to widen post-compulsory participation these barriers need to be recognised and faced (Calder 1993, Burchardt et al. 1999). To a large extent the barriers proposed are presaged by the patterning of adult learning. In one small study, Hudson (2005a) found that HE departments described the following barriers to widening participation:

- Traditional assessment procedures.
- Staff fears about lowering standards.
- Staff lack of awareness about diversity.
- Organisational resistance to change.
- Some poor perception of Art and Design as a career.
- Buildings not adaptable to handle disability.
- Complacency in relation to other subject areas.
- Lack of transport for students in rural areas.

Many of these are addressed in the rest of this review, but others such as transport apply to all forms of participation. In one small study of one area and one further education (FE) college, a major reason for not continuing with study was given as distance to the nearest FE college (Hramiak 2001). For the ethnic minority women involved, it was perhaps more about psychological distance from family responsibilities than the actual travel involved.

Perhaps the most obvious obstacle that most people face when envisaging episodes of learning is the cost (McGivney 1992). This cost could be of the direct kind, such as fees, or indirect, such as the costs of transport, child-care, and foregone income (Hand et al. 1994). Benefit entitlement is generally incompatible with formal learning episodes, even when all of the costs of training are met by the individual (Maguire et al. 1993). The Employment Service (1991 amended) made clear that 'one of the conditions... to be entitled to unemployment benefit is that you must be ... able and willing to take up any job which you are offered immediately. You might not satisfy this rule while you are on a training or education course or programme...', and many people leave learning episodes before completion because of uneven interpretation of the rules by benefits offices. Payment of fees to institutions by instalments is not generally allowable, and many new learners are surprised by the level of other expenses, such as examination fees and stationery costs. The increase in students continuing to HE has been accompanied by an increase in the number in debt and the situation is often worse for mature students (Gorard and Taylor 2001). In 1995, many HE students aged over 26 were over £7,000 in debt already (Garner and Imeson 1996) and the situation worsened with the ending of the older students' allowance so that by 2004 the average debt on graduation was £12,000 (NatWest Money Matters Survey and Barclay's Annual Graduate Survey).

The loss of time, particularly for a social life, is another cost of learning in some cases (McGivney 1990, FEU 1993). Adult education may have begun to suffer not so much from lack of leisure time but from the multiplicity of opportunities available for that time (Kelly 1992). Taking a course often involves an adjustment in lifestyle which may be possible for an individual, but is more of a problem for those with dependants

or in long-term relationships. Partners as well as children can reduce the time available for learning in women's' lives more than for men (Abroms and Goldscheider 2002). For some women, even those who had been successful at school and who had clear plans about how their career and life would unfold, their further opportunities were often put on hold perhaps because of children and so they 'essentially replicated the employment patterns of women of an earlier generation' (p.265). The most vulnerable women from the most disadvantaged backgrounds seem to face the greatest barrier in terms of time. In fact, all such costs are clearly more restrictive for the poor, and for those with other financial commitments, such as a young family. Therefore, if cost is a barrier it can help explain some of the differences in patterns of participation.

Harrison (1993) would categorise cost as a situational barrier stemming chiefly from the life and lifestyle of the prospective learner. There are also institutional barriers, created by the structure of available opportunities, and dispositional barriers in the form of individuals' motivation and attitudes to learning.

The institutional barriers to training often come from the procedures of the providing organisations, in terms of advertisement, entry procedures, timing and scale of provision, and general lack of flexibility. Colleges of FE, for example, have traditionally assumed a 17-year-old norm, and are having to adapt to more flexible opportunities for learning. People want to fit learning around other tasks of equal importance in their lives, since they cannot always get time off. They often have interrupted patterns of participation and diverse progression routes (Gorard and Rees 2002). Non-completion of courses is so high that it must be partly seen as an indictment of the quality of provision at all levels, schools, FE, and YT. Drop-out is commonly caused by people discovering that they are on the wrong course, with nearly half of FE students in one survey feeling they had made a mistake (FEU 1993), and part of the blame for this must lie with the institutions in not giving appropriate initial guidance (Maguire et al. 1993). Many learners are disappointed by the lack of help available in choosing a course and in staying on it. There has been, in general, a low level of awareness of sources of information and financial incentives for training (Park 1994).

Part of the cause of lack of participation may have been the lack of appropriate provision (Banks et al. 1992). Even those studying may not have found what they actually wanted (Park 1994). This is particularly true of non work-related training and learning for leisure, and is reinforced by the current emphasis on certified courses, heavily backed up by the incentives in the funding arrangements to provide accreditation of all adult education. Not only does this deny some people the opportunity to learn new interests and make new friends, it denies returners an easy entry route back into education (Maguire et al. 1993). Even where provision is available, knowledge of opportunities may be patchy for some parts of the population (Taylor and Spencer 1994), giving many a feeling that 'you are on your own'. In addition, an estimated six million adults in Britain may have difficulty with writing or numeracy, and one sixth of adults have problems with basic literacy. These deficiencies appear to pass through generations of the same families (DfEE 1998), reinforcing their importance as a 'reproductive' determinant of adult non-learning.

Whatever barriers are faced, they are harder for the less motivated prospective student. The lack of provision of learning for leisure and at home, with a focus only on formal public arenas such as work means that learners may be seen as younger, better educated, and from higher income groups than they really are (Edwards et al. 1993). To some extent, this image becomes self-realising. People with these characteristics tend to be selected for learning, and so social practice becomes reproductive, and education comes to be seen as middle-class and 'not for the likes of us'. It may be a poor experience of previous educational episodes that creates the obstacle for continuing education (Taylor and Spencer 1994). If initial education has not led to the creation of basic studying skills such as numeracy, this provides a further barrier.

On the other hand, several studies have found no difference between learners and non-learners in their attitudes to full-time education (Park 1994). Differences in class culture are no longer such a barrier to post-16 or post-18 participation (Furlong 2005). Perhaps the benefits of participation are more widely acknowledged while the actual culture of HE/FE has converged with mainstream culture. Most people acknowledge the benefit of learning, although learners are more likely to report non-material benefits, but at least a third, especially volunteer self-funders and the unemployed, do not see learning as having any positive effect on job prospects.

The influence of lack of motivation to learn may be underestimated by literature concentrating on the more easily visible barriers such as cost and entry qualifications. (McGivney 1993). Many people display an incorrigible reluctance to learn formally. In fact, perhaps 21% of adults form a hard core of non-participants outside all attempts to reach them (Titmus 1994). If all the barriers were removed for them, by the provision of free tuition and convenient travel, they would still not want to learn. They have no desire, and given greater leisure time would want to 'just waste it'. Self-identity in Britain may be more strongly linked to a job than it is in other countries, where a greater emphasis is placed on learning (Bynner 1998). Lack of drive thus becomes the most important barrier of all, since it is seen as too easy to get a job instead, and qualifications are seen as useless anyway. Some young people do not even bother to find out what their public examination results are (Banks et al. 1992), since they are only concerned with getting a job. Qualifications may even be seen as antagonistic to getting a job, and only concerned with entry to more education. Learning is something done early in life, as a preparation, but with no relevance to the world of adults (Harrison 1993). Such attitudes may form early, in the links between school and family expectations (Reay et al. 2005). This 'learner identity' is such a threat to the rapid increase of students in HE that it is dealt with in more detail later in the review.

The idea of barriers to learning is elegant, both as explanation of the differences in participation and suggestion for their abolition. However, there is a danger that they tend towards tautological non-explanations. The relatively low level of participation from lower-income groups, for example, gives rise to the explanation that cost is a barrier. If this is so, then removal or reduction of the cost should lead to increased participation from lower-income groups. This is the logic underlying grants, fees remission, and means-tested bursaries, but there is little direct evidence that these approaches work differentially well for the groups for whom they are intended.

Removing the apparent barriers to participation is not as easy as it sounds (Selwyn et al. 2005), and this casts doubt on the value of the concept of barriers as an explanation of non-participation. It leads us instead to a fuller consideration of the personal, social and economic determinants of participation and non-participation in education. Our methods for the conduct of such a review are outlined in the next section.

2. Conducting the review

Summary

On the basis of the argument mounted in Section 1, our review is based on a lifelong approach, considering changes over time and examining earlier life factors that influence participation – such as family, peer-group and initial education, all of which help to build the learning ‘trajectory’ of individuals that leads them to consider HE as a possibility.

In Phase One, research materials were located and catalogued to create a database of references. A range of methods was used to search for research material manually and electronically. Individuals and organisations were also invited to submit their evidence to the review. The review looked for evidence relating to the participation of people from specific target groups and the factors impacting on their participation (with a focus on undergraduate higher education) throughout the lifecourse, and in different sites of learning.

Studies were judged on the quality of reporting the research methods, the nature of the evidence, and the quality of the evidence. Judgement of the usefulness of evidence depends heavily on the quality of reporting. Some of the literature did not present findings, some did not describe methods, and in some cases there was a weak link between the evidence presented and the conclusions drawn. There was an absence of ‘what works’ studies. The review focused on what can be learned from any relevant research evidence, as it is reported, given the limitations of the study.

In Phase Two, the assembled research evidence was reviewed to produce syntheses in response to a number of broad questions and policy concerns: the problems of widening participation, possible courses of action, needs for future research or data, cautions, and any good practice. It is, therefore, not a ‘systematic’ review in the narrowly accepted sense.

There are three main types of approach employed within the review:

- *Larger fields/sections composed of several more precise questions are dealt with by a traditional, but appropriately critical, narrative review.*
- *Some sections appear as brief, more traditional, narrative reviews addressing specific and relatively narrow research questions.*
- *Where there is a key specific question that should be answered but which has little work done on it, then the review section makes recommendations for future work.*

This section describes our lifelong approach to the review evidence, and our methods for identifying and synthesising the evidence.

2.1 A lifelong approach

The researchers take a lifelong view of the decision to participate in HE or not. Therefore, evidence relating to earlier life factors that influence participation – such as family, peer-group and initial education – can be crucial. Such factors all help to build the learning ‘trajectory’ of individuals that leads them to consider HE as a possibility or not. Also relevant is evidence relating to course and institution selection, barriers within HE, retention, the policy and structure of HE in England, the allocation of places, the funding arrangements, the geography of opportunities, entry requirements, the labour market, the structural barriers to access and retention, the practices and policies of widening participation of currently under-represented groups undertaken nationally, regionally, by sector or institutions, including the success of initiatives to overcome the structural barriers to access.

Taken as a whole, this list is potentially very wide and could cover almost any societal or life experience, so the emphasis here is on those factors having a plausible direct influence on later participation in HE. For example, a study of curriculum development in primary school physical education would probably be rejected as being too remote from the subject of the review to be of any likely relevance. The wider social, contextual and early schooling literature is considerable, and so the review tries to be representative of this literature and comprehensive of the more specific recent WP literature in England.

In terms of identifying questions, and structuring the review, we considered two different elements of change over time. Over historical time (between successive cohorts), as equality legislation and WP funds come into play, what has been the impact on participation – who gets what, what are the remaining obstacles? Over the lifecourse of the individual (within one cohort), what are the social, economic and educational determinants of participation? Or put another way, when in the lifecourse do barriers, differences, and problems emerge? What can we do about these in the longer term? In the short term, what can we do to ‘compensate’ for these differences? Since we cannot expect to address all relevant and useful questions, the rest of the report is structured around what we see as the key ones encountered so far.

2.2 Searching for the evidence

As part of the collation of evidence relevant to WP in HE, we advertised for evidence, proactively contacted key lists and organizations, and systematically searched journals and websites. As with any other review (Kahn and Macdonald 2004), the search also involved bibliographies, electronic databases, and hand-searching of key documents. The search strategy depended on selection of relevant keywords, and also asking for help via specialist expertise, personal contacts, and email lists.

In Phase One – the collation of all and any evidence – we have been as inclusive as possible, searching for and identifying a wide range of published and informal literature. The contemporary access and widening participation agenda in England can be traced back to 1997, specifically to the report of the National Committee of Inquiry

into Higher Education, chaired by Lord Dearing (Dearing 1997), which coincides with the election of a New Labour administration. We focused largely on literature published from this date. Especially influential work that pre-dates 1997 is included (and, by definition, was not sought in the same way).

The review has a primary focus on current and future undergraduate education in England. 'Higher Education' is interpreted as Level 4 provision or above in any institution, whether designated HE or FE, including foundation degrees and postgraduate progression. However, evidence from other places, such as other home countries of the UK, and sectors of education are included where it is especially powerful or relevant.

Evidence can be in any form, of any scale, using any method. Material encountered during the search has been rejected in Phase One on two main grounds. These are lack of relevance to the review, and not being research related.

We searched resources in three main ways. We selected a key source, such as the Journal of Education Policy, and examined its contents for as many years as available online or back to 1997 (whichever was the lesser). On encountering a relevant article, we added the sources listed in references from the article to our search list. So, an article in the Journal of Education Policy 2004 might refer to a relevant paper in Social Forces 2003. We then searched Social Forces in the same way. The second main approach to searching was to use search engines and a list of evolving search terms, such as 'learning trajectory, access, widening participation, diversity, lower socio-economic, ethnic minority, disability, retention, success, or barriers'. This e-search was especially targeted at grey literature. Thirdly, we used advertisement, emails to research and practitioner lists or to key stakeholders, conference presentations and other forms of awareness, to encourage those with relevant evidence to alert us to it. We hoped thereby to increase our awareness of studies by research students. To the material gathered through these approaches we also added literature known to us from our previous work in the field.

For electronically available material, a copy was saved and the bibliographic details including URL and abstract/summary recorded on Endnote. For paper-based material, a copy was made, and the bibliographic details and abstract/summary recorded on Endnote. We subsequently coded each item in terms of a 'map' of areas covered (see below). These form the basis for the critical appraisal of evidence in Phase Two. The results from Phase One, along with the map codings, are downloadable at <http://www.york.ac.uk/depts/educ/equity/barriers.htm>. There are currently around 1,200 relevant research reports logged as references and abstracts on Endnote, classified by map code, and saved as a full copy where possible.

Our request for help appeared in The Times Higher Education Supplement, and Metro, and as part of our general communication with colleagues via email, and on our own institutional web pages. We emailed a large number of groups concerned with higher education, education over the lifecourse, widening participation, and social justice. We attended conferences and advertised the request for evidence at these. We fully searched a large number of journals and online resources. A list of these sources appears as Appendix B.

The search involved reading the abstract (or equivalent, or more if necessary) to make a preliminary decision on four matters:

- Does the report describe research?
- If so, is it relevant to our review?
- If so, which elements of our analytical map does it relate to?
- What is the quality of the evidence?

In Phase Two we decided on the weight to attach to the summary of evidence, on the basis of answers to these questions. We aided this decision by pre-forming a conceptual map of the areas or questions where we would expect to find evidence. For this review, we tried to avoid being unduly influenced by the partial nature of the research we actually found. In some areas, there was a considerable body of relevant reports, and these are summarized to provide reasonably clear proposals for policy and practice. In other areas, there was little in the way of rigorous evidence. We use what is available in these sparse areas as indicative of what could be done, or to give suggestions for future research or routine data collection. This is one reason why we do not have a simple quality threshold for accepting or rejecting reports. To some extent the prominence given to a study will depend on how many other pieces deal with the same issue. Guidelines for reviews suggest that the data extraction process for each study takes about three hours as a minimum. Given the finite number of researcher days available, we needed to use the map and the reporting quality to prioritise the necessarily limited number of pieces that we dealt with fully in Phase Two.

The review considers a range of target groups in relation to barriers or disincentives to learning, throughout the lifecourse and in different sites. The following topics can be considered as a three dimensional matrix to create a ‘map’ of the terrain we are considering. The full map and associated code numbers appear in Appendix C. The codes for each map location are those used to sort the references in our Endnote database. Clearly, some references are relevant to more than one map location.

i. Target groups

Factors affecting the participation of people in higher education will not be uniform. A targeted approach to widening participation has been adopted in England, and in many other developed countries (although the target groups differ). It was felt to be appropriate to explore issues of participation in relation to different target groups. However, as the Australian experience demonstrates, a simplistic adherence to target groups can overlook the multiple disadvantages that some individuals experience, and ignore the dynamic nature of access to learning. We, therefore, sought evidence in relation to different target groups, and also about the interaction between these categories (such as class and disability, age and qualifications).

ii. Factors impacting on participation throughout the lifecourse

Our review is adopting a lifelong learning approach to participation in higher education; we, therefore, sought evidence throughout the lifecourse of the impact of specific policies and interventions to address different forms of disadvantage. This is related to students from the different target groups identified above, and different sites of learning.

iii. Different sites of learning

Higher education takes place in a number of different sites, and the review sought evidence about the barriers to access and success in different types of sites in relation to different student groups and throughout the lifecourse.

2.3 Quality of research and reporting

Our critical appraisal of each remaining study consists of three main judgements: on the quality of the research reporting, the nature of the evidence, and the quality of the evidence. Judgement of the usefulness of evidence depends heavily on the quality of reporting. We should expect research to contain somewhere within its report all of the basic information needed for another researcher to replicate the work, including the analysis. We may need to know the number of cases, how they were selected, the research design, instruments, context of data collection, methods of analysis, prevalence of findings and so on. This should be summarized at the start of the report. We should also expect a description of what has been found, including a description of the evidence (and not merely an account of what the researchers believe this to signify). These minimum criteria are not especially demanding, yet early indications are that many reports do not contain this information. The situation has not changed much since similar complaints were made by Tooley with Darby (1998).

Reports differ in the amount of information they give about the nature and methods of research. Reports giving more information of this type cannot be favoured over others that do not (given that the information provided may show up flaws in the research). But reports that do not give full information (and so do not allow the showing up of flaws) must not be favoured over fuller reports. Therefore, in the absence of any research methods information the reviewer must assume the 'worst'. Where totally insufficient information is given the report is generally excluded from further consideration, as though it were the equivalent of a non-research report. Clearly, our review relies almost exclusively on the best-reported research. The quality of reporting is high enough in these cases to start a discussion of the fit between research questions, methods, evidence and the conclusions drawn. However, even in this best-reported category of research there are numerous problems for a reviewer.

One of our first findings is that a substantial proportion, perhaps one third, of ostensible research reports do not actually report new research evidence or analysis of any kind. This phenomenon has been noted before in other contexts (e.g. Gorard et al. 2004a). There are, of course, literature reviews which are useful for future reviewers as a ready source of references and, if conducted rigorously and sceptically, can provide a useful synthesis of an entire area. There are also research method and methodological pieces which are, on occasion, thought-provoking and helpful. But in addition to these, the research literature contains a high proportion of 'thought-pieces' with no clear empirical content, no summary of the research of others, and no assistance to others intending to conduct research. We generally exclude these three categories, totalling perhaps 40% of the literature, from further consideration here. Our review focused on what we can learn from any relevant research evidence as it is reported by those who understand how it was conducted and, therefore, what its particular limitations are.

Of the remaining 60% or more of relevant pieces encountered that actually presented evidence, only a subset gave sufficient information to make a judgement of quality. Of these, a high proportion showed substantial defects. Other than weakness in reporting evidence, the most common generic defect was the link between the evidence presented and the conclusions drawn from it. There were a number of repeated problems, some of them outside the control of the researchers themselves. These included deficient datasets, lack of controlled interventions, lack of suitable comparators, exclusion of those not participating in education, and lack of agreement about how to compare differences over time and place. A typical piece of work in this field involves a small number of interviews with a group of existing *participants* in education, usually from the same institution as the researcher. Such a study cannot uncover a causal model, is difficult to generalise from, and tells us nothing about non-participants – the group that much work in this field is ostensibly concerned with. So common are these flaws, not specific to research concerning widening participation in education, that they are not generally remarked on by authors, picked up in peer review, or taken into account when attempting to draw warranted conclusions from one or more studies.

Research reports, perhaps especially of work traditionally termed ‘qualitative’, regularly present their conclusions as though these were the findings, and present the actual evidence for the conclusions sparsely – often merely as illustrations. In such reports, there is no way of knowing how widespread any finding is, or how likely it is that a different analyst would reach similar conclusions. Therefore, only the illustrations provided can be used safely as the evidence for any review. Note that this is not always so, and that higher quality reports describe the prevalence of patterns more clearly, or present some form of validation of the analysis (e.g. Ball et al. 2002). Research reports of complex statistical models can produce some of the same problems for a reviewer, where the reviewer does not have access to the dataset and the actual data is not summarised clearly.

The general pattern of research problems encountered during our review is not especially about the quality or desirability of different methods of investigation or analysis. Also, the issue of concern here is not whether the conclusions drawn by researchers can be shown to be true or not by other means. What is common to most of the problems encountered is that the research reports do not provide evidence that can support the conclusions drawn by the researchers – i.e. the latter are not warranted by the evidence actually presented for them (Gorard 2002a). This complaint applies even more strongly to reports that present conclusions based on poorly reported research. This does not, necessarily, mean that the evidence presented is not valid in some way. Therefore, a research report cannot be excluded from the review synthesis simply because its authors are considered to be in error in reaching their conclusions. In the review of evidence, we largely ignore the background, theory, and conclusions of research reports anyway (except as context) and focus on the description of the methods and the actual findings as reported directly. This approach allows a larger number of pieces to be involved than in a traditional synthesis, but would allot many of them a much smaller role befitting the absence of detailed reporting of their findings.

It has been traditional to assess the validity of research at least partly in terms of whether it has been evaluated or peer-reviewed (Kahn and Macdonald 2004). Peer

review is used as the major quality control mechanism for academic publications, but it is inconsistent between publishers, journals, and reviewers. It also tends to suppress innovative and imaginative work, can create a ‘file-drawer’ problem wherein only ‘significant’ results are published and, in education at least, takes so long that it leads to the publication of already dated work. We illustrate in Appendix D some of the problems in some research reports in high-ranked social science journals, from prestigious institutions, or by well-known figures in the field. On this basis, we decided that it is not possible to rely on any kind of ‘kitemark’ for the quality of evidence. It is not the case that passing peer review to appear in a prestigious journal is, in itself, a guarantee of quality in research or research reporting. Nor is it possible to rely on work from specific individuals, institutions, or organisations.

Some studies will have several reports, based on the same dataset, perhaps intended for different audiences. It is vital for any weighting process that the same evidence is not used twice. Therefore, the best complete report of the methods and findings is used and, in this case, alternative versions rejected from further analysis. Some reports will have evidence from more than one study. This is not a problem for the approach adopted here, where we focus on the findings themselves rather than any form of vote-counting of the conclusions.

2.4 Summarising the evidence

In Phase Two, the relevant research reports identified as part of Phase One have been summarised or synthesised to produce the review of evidence. It is important to recall that what follows cannot be, and was never intended to be, a series of formally systematic reviews, and that no new analysis or re-analysis of data is involved. To a large extent, this review is concerned with what is, what could be, and what works to make it so. Therefore, it is not necessary for us to deal with philosophical issues about the nature of research. For the purposes of this review, there *is* an external reality, it is possible to learn something about this reality via research, and it is possible to change this reality. If these assumptions are not held by all of the parties concerned then it would be unethical to spend public money on the review.

Many examples of systematic reviews, and much of the literature on which these are based, involve answering a specific research question (Cooper 1998). The question often concerns the impact of an intervention. Neither of these applies here. Our research questions are broad and there is no intervention. We are concerned to find the background information needed to identify the problems of WP, possible courses of action, needs for future research or data, cautions, and any good practice. It is a scoping study and review. It is, therefore, not ‘systematic’ in the narrowly accepted sense. Given all of these differences, many of the suggestions for traditional review are not applicable.

The review is ‘patchy’, in the sense that some areas are covered in more detail than others. Not all questions and themes could be dealt with in the same way, or to the same extent. There are three main types of approach within the review:

1. Where there is a key specific question that should be answered (according to the map, for example) but with very little work done on it, then the review section will largely make recommendations for future work.
2. Otherwise, larger fields/sections composed of several more precise questions are dealt with by a traditional, but appropriately critical, narrative review. This type of mini-review will cover most of the material found in Phase One.
3. Some sections appear as brief, more traditional, narrative reviews addressing specific and relatively narrow research questions.

Harden and Thomas (2005) cast doubt over the value for any review of considering whether a study could be deemed 'quantitative', 'qualitative' or mixed. In fact, as they argue, nearly all research is mixed once viewed in terms of its component parts (Gorard 2004). Clearly meta-analysis could be used for collections of randomised trials on the same topic (although we encountered none). Otherwise, all that remains is a synthesis of perspectives and findings based on judgement (Gorard 2006a).

3. Evidence from the life stage before HE

Summary

Inequalities in HE participation are evident throughout the lifecourse and include differences in terms of time (and age), place, gender, ethnicity, first language, parental (and sibling) social class, parental education, type of school attended, housing tenure, health/disability, criminal activity, learning difficulties, family structure and religious background. Multiple social disadvantage can result in inequalities in initial education and, subsequently, participation in other forms of learning. Parental income and education are particularly influential. Occupational status and family size are also relevant although the causal pathway is less clear. Quality of life factors (such as infant health) are important for understanding disengagement from education rather than participation within it.

Can these familial patterns be interrupted via educational and other interventions? Some pre-school schemes appear to be generally beneficial, (although a causal relationship cannot be established), whereas others have little effect. Where initiatives are beneficial in absolute terms, they are not especially effective in reducing inequality. In some cases, more advantaged students even appear to gain more, leading to an increase in inequality. The question is raised as to whether policymakers should seek to reduce inequality in education directly, or seek to reduce the wider inequalities that are reflected in education.

The total proportion of the 16-year-old cohort remaining in education, government schemes, and employment-based training combined has remained constant, even though the balance between the three routes has varied according to funding and availability over time. The majority of students in any study report that they want to, or choose to, remain in education to the next level. The decision to enter HE is often taken several years beforehand. The main reason for wanting to participate was to gain access to better employment. The main predictor of whether or not they remain in education was success in prior school examinations.

Parents are a major influence in shaping students' decisions to participate in post-compulsory education and in their choice about where to study and what courses to follow, irrespective of whether they had direct experience themselves. Parents' occupational class asserts a strong influence on the choices students make. Peers exert a certain amount of influence, particularly post-16 and also over choice of subject. There remains only a limited role for schools and teaching staff in influencing students' decisions whether or not to participate. In addition, local provision, visibility and take-up of HE could be important influences on staying-on rates post-16 – but these strands are insufficiently separated analytically to be clear.

The main reported reason for leaving was to begin earning a wage. Other reasons included not needing to achieve a level of qualification in order to pursue their chosen career, and the (non-explanatory) desire to stop studying and leave education. There is limited evidence that not wanting to end up in debt was informing some young peoples' choice. Financial concerns were mediated by personal and private reasons, but many seemed resigned to ending up in debt. Differences in aspiration

between students from particular social classes were not evident, once differences in achievement have been allowed for.

There is a lack of research attempting to draw a link between background characteristics and aspirations to participate in post-compulsory education, about the effectiveness of different pre-entry interventions with young people, and whether school-based interventions have an impact on aspirations to enter HE. Researchers have claimed that school-based interventions have the greatest positive effect on young people when the following conditions are met:

- *Explicit and effective targeting.*
- *Activities of interest and relevance to the young people.*
- *Activities are interactive and engaging.*
- *Activities do not take place in isolation and they are reinforced by the school.*
- *Parents are engaged.*

The pattern of social and economic under-representation in HE for young students is already apparent in the qualifications obtained at Level 3, and among those with pre-university qualifications equivalent to NVQ Level 3 or 2 or more A-levels. This pattern is, in turn, based on differential staying-on rates in schools and colleges (NIACE 2000). Many of those who stay on in education after the age of 16 to take Level 3 qualifications do so in order to try and attend HE. These staying-on rates are, in turn, heavily based on Level 2 qualifications, and so on. This leads us to two important conclusions for the review. The solutions to any problems facing WP are not only to be found in HE itself. Indeed, the solution to educational inequality more widely may not be found in education at all. Second, to understand these patterns we have to take a lifecourse view of participation. Therefore, the substantive part of this review is presented in lifelong order, from pre-university, through attendance at HE to life after HE. In this section we cover issues relevant to the life stage before attending HE.

3.1 Early-life context and education

It is important to be clear about the strength of the lifelong pattern of inequality in education described in Section 1, and also its transmission across generations of the same family (Gorard et al. 1999b, San-Segundo and Valiente 2003). Early context factors are closely related to early educational attainment, which is in turn related to staying-on rates at age 16, and so to patterns of participation in HE.

There is a clear pattern of typical learning ‘trajectories’ which effectively encapsulates the complexity of individual education and training biographies. Which ‘trajectory’, from non-participation to lifelong learning, an individual takes can be accurately predicted on the basis of characteristics which are known by the time an individual reaches school-leaving age. This does not imply, of course, that people do not have choices, or that life crises have little impact, but rather that, to a large extent, these choices and crises occur within a framework of opportunities, influences and social expectations that are determined independently. At this level of analysis, it is the latter which appear most influential. Hence, the ‘trajectory’ which people join is largely determined by the resources which they derive from their social background.

Moreover, an individual's capacity to take up whatever learning opportunities are available is constrained by their previous history in this respect. However, 'trajectories' do not simply reflect the constraining effects of structured access to learning opportunities. The individual educational experiences of which they are comprised are simultaneously the products of personal choices, which themselves reflect 'learner identities'. Similar analyses, conducted with several different datasets totalling 10,000 adults across the entire UK, have shown that the same determinants of post-compulsory participation appear each time (Gorard et al. 2003). These findings are robust. The key social determinants predicting lifelong participation in learning involve time, place, sex, family and initial schooling.

When respondents were born determines their relationship to changing opportunities for learning and social expectations. It is significant that respondents with similar social backgrounds from different birth cohorts exhibit different tendencies to participate in education and training. Time may represent a variety of factors such as changes in local opportunities, economic development, the increasing formalisation of training, the antagonism between learning and work, and the changing social expectations of the role of women.

Where respondents were born and brought up shapes their social expectations and access to specifically local opportunities to participate. Those who have lived in the most economically disadvantaged areas are least likely to participate in lifelong learning. This may be partly to do with the relative social capital of those in differing areas, or the changes in actual local opportunities to learn. However, those who have moved between regions are even more likely to participate than those living in the more advantaged localities. It may not be an exaggeration to say that those who are geographically mobile tend to be participants in adult education or training, while those who remain in one area, sometimes over several generations, tend to be non-participants.

Men consistently report more formal post-16 learning than women. Although the situation is changing, these changes are different for each sex. Women are still less likely to have participated in learning lifelong, but are now more likely to have undertaken extended initial education. Extended initial education appears now to be relatively gender neutral, while later education or training is increasingly the preserve of males. For the respondents in one study, any choices which were made are perceived to have been heavily constrained by external circumstances. Perhaps most obviously, many older women describe the ways in which the learning opportunities available to them were limited by local employment, social expectations as to what was appropriate or by a 'forced altruism' with respect to family commitments. Even some of the younger women respondents provide similar accounts (Gorard et al. 2001).

Parents' social class and educational experience are perhaps the most important determinants of participation in lifelong learning. Family background is influential in a number of ways, most obviously in material terms, but also in terms of what is understood to be the 'natural' form of participation. Moreover, for a number of those who had participated actively in post-school learning this is seen as a product of what was normatively prescribed within the family or, less frequently, the wider community, rather than their own active choice (Gorard et al. 1999b). Families are

universally acknowledged as a key determinant of educational performance in primary and secondary schooling and, by extension, in higher education too. In compulsory education, similar educational routes within families are widely recognised. For example, the occupational or class background of parents is routinely used as an explanatory factor in analyses of educational attainment or progress through the compulsory educational system (Halsey et al. 1980). Similarly, the influences of ethnic background are recognised as being mediated through families (Wilson 1987).

It is striking, however, that this very powerful explanatory framework of family influences on educational performance is rarely extended to the analysis of participation in lifelong learning. The few studies which have been conducted have generally found much weaker links between the involvement of parents and children in education and training through the lifecourse (Cervero and Kirkpatrick 1990). Indeed, the correlations between parental education and the child's later participation in education in the longitudinal model created by Yang (1998) are so low that, even when combined with many other predictor variables (such as school attainment and attitudinal variables), only 23% to 30% of the variance in participation is explained (and it should be noted that this model only caters for adults aged from 16 to 32). Gorard et al. (1999b), on the other hand, find that almost half of the children who are lifelong learners have parents who are lifelong learners themselves (46%). Similarly, more than half of the children who are non-participants have parents who are non-participants (61%). It is clear that, for whatever reason, patterns of participation 'run in families' to some considerable extent.

Experience of initial schooling also appears to be important in shaping long-term orientations towards learning, and in providing qualifications necessary to access many forms of further and higher education. 'Success' or 'failure' at school affects the choice of what to do post-16 – and there even appears to be a school effect on choice (Pustjens et al. 2004). Experience of school lays the foundation for what could be an enduring 'learner identity'. It is striking, for example, how those who experienced the 11-plus examination testified to its major and often traumatic effects (Gorard and Rees 2002). For respondents too young to have gone through the tripartite system, although 'success' and 'failure' are less starkly defined, it remains the case that they identify positive experiences of schooling as crucial determinants of enduring attitudes towards subsequent learning. In contrast, those who 'failed' at school often come to see post-school learning of all kinds as irrelevant to their needs and capacities. Hence, not only is participation in further, higher and continuing education not perceived to be a realistic possibility, but also work-based learning is viewed as unnecessary. There is thus a marked tendency to devalue formal training and to attribute effective performance in a job to 'common-sense' and experience. Whilst this is certainly not confined to those whose school careers were less 'successful' in conventional terms, it is a view almost universally held amongst this group (Selwyn et al. 2005).

It is important to note that all of the factors dealt with so far reflect characteristics of respondents which are determined relatively early during the lifecourse. Gorard and Rees (2002) entered variables measuring these five determinants – time, place, sex, family and initial schooling – into a logistic regression function in the order in which they occur in real life. Those characteristics which are set very early in an individual's

life, such as age, gender and family background, predict later ‘lifelong learning trajectories’ with 75% accuracy. Adding the variables representing initial schooling increases the accuracy of prediction to 90%. One possible explanation for this remarkable finding is that family poverty, lack of role models, and a sense of ‘not for us’, coupled with poor experiences of initial schooling can act to create a kind of lifelong attitude to learning – a negative learner identity. In this case, the obvious barriers such as cost, time and travel are largely irrelevant (see Section 1). In the same way that most of the population is not deterred from higher education by lack of finance (largely because most young people with the requisite entry qualifications already attend HE), so most non-participants in basic skills training are not put off by ‘barriers’ but by their lack of interest in something that now seems alien and imposed. To deal with this, we have first to understand it. In the relative social and economic situation for any individual, the choice not to participate could be completely rational. We need to revise any complacency that the existing set-up for learning is appropriate for all, and that the reluctant learner need only be lured back ‘on track’.

These results also offer important correctives to the conventional view of participation in lifelong learning – the ‘accumulation thesis’ which prioritises the determining influence of earlier adult behaviour on what education and training individuals undertake later in their lives. As Tuijnman (1991) puts it, the best single predictor of later participation in education and training is earlier participation. Nevertheless, it is important to note that even here the correlations are very low. Therefore, ‘...the lifelong education cycle cannot be comprehended without the inclusion and analysis of other factors influencing the accumulation of educational experiences’, (Tuijnman, p.283). These other factors include area of residence (representing perhaps local economic conditions), gender, and parental occupation, as well as parental education (Gerber and Hout 1995, Zhou, Moen and Tuma 1998). The ‘accumulation thesis’ appears much weaker and the role of parental background appears much stronger than has been argued conventionally. The reasons why early learners are more often lifelong learners could be the same as the reason for their early participation, and based on family background, gender, and regional conditions. This would be as convincing an explanation as the accumulation model. For example, while initial educational success may be a good indicator of later participation according to some accounts, the success itself can be at least partly predicted by social and family background in the model proposed here, and considered in this review.

The inequalities in HE participation, specifically, are clear in terms of time (and age), place, sex, ethnicity, first language, parental (and sibling) social class, parental education, type of school attended, housing tenure, health/disability, criminal activity, learning difficulties, family structure and religious background. However, precisely the same inequalities are apparent in slightly reduced form in patterns of initial education, and in even stronger form in patterns of other forms of adult education which recur in succeeding generations of the same family (Gorard and Rees 2002). So pervasive are these inequalities that it might be misleading to think of them as ‘educational’ problems at all. At an aggregated level, Gorard et al. (2004b) conducted an exploratory factor analysis, for the Basic Skills Agency, with a basket of indicators of relative disadvantage and found that nearly all of them were expressing the *same* underlying factor. These indicators included attainment in Maths, Science and English at Key Stages 1, 2, and 3, GCSE benchmark of five or more grades A*-C, the number of school leavers with no qualifications, and the number of adults of working age and

of all ages with no recognised qualification, indicators of childhood disadvantage, eligibility for free school meals at primary and secondary school, child poverty, children living in households on benefit, protected and registered children, where people were born (within the EU), local economic activity rates, the proportion of those on benefit, unemployment rates at age 16, long-term and overall unemployment, social housing, household income, health scores, poor health, life expectancy, total absences from school (sickness), all indicators of teenage pregnancy, and the proportion of abortions. Put more simply, inequalities in initial education could be viewed as simply a manifestation of profound multiple social disadvantage. This overall 'quality of life' factor is key to our understanding of disengagement rather than participation.

In a review of evidence on the impact of parental education on early life, Feinstein et al. (2004) showed that key influences on child attainment in the early years include parental education and income. Occupational status and family size are also relevant but the causal pathway is less clear here. Once parental income and education are accounted for, then measures such as family structure, maternal employment or teenage motherhood are not important in isolation as determinants of child attainment. One explanation for this pattern relies on an assumption of the inheritability of 'talent'. If parents are talented (in these terms) then they may be more likely to have higher levels of attainment and income, and they may be more likely to pass this talent on to their children. Another explanation would be that the income and education of parents affects their beliefs, values, aspirations and attitudes, and these are 'transmitted' to their children via proximal interaction. A further explanation is the multiple disadvantage outlined above. In fact, of course, trying to separate out these types explanations is almost impossible on the basis of the kinds of data available to us (cf. Donald Hebb's rectangle). It is also, according to Rawls (1971), irrelevant anyway. Whatever the cause, the solution is the same – diverting extra help and resources to those most at disadvantage.

A more important question to address is, therefore, whether these familial patterns can be interrupted via educational and other interventions. State-funded compulsory education for all children is just such an intervention, intended to equalise life opportunities and remedy inequalities such as the number of books at home or the reading ability of parents. However, because this intervention is universal and is now so mature, it is now very hard to decide what effect it has had on educational mobility. In fact official school improvement policy is now based on contextualised value-added analyses which, in addition to facing scientific challenges, make it impossible to decide whether schools are successfully compensating for early disadvantage or not (Gorard 2006b). On an appropriately sceptical reading, it is difficult to find any evidence that subsequent, less bold, initial education interventions have had much impact on patterns of inequality at all. In general, taken over historical time periods, both the quality and equality of education in England have grown over time (e.g. Gorard 2000). However, what is largely absent from these trends are abrupt or localised changes attributable to specific changes in educational practice (Gorard 2006c).

Merrell and Tymms (2005) considered data from a variety of pre-school schemes intended to overcome the negative relationship between economic deprivation of children and their early skills such as language learning. Again, the evidence from

several such studies is quite clear. These interventions appear generally beneficial, in the sense that there is a slight advantage in attending such a scheme rather than not (although in the absence of random allocation we cannot tell whether this is a volunteer/motivational effect). However, such schemes do not ameliorate the (weak) relationship between deprivation and language skill. This is a common theme across sectors and ages of education. Many initiatives are ineffective, either by not being associated with any improvement (Gorard et al. 2002a, Gorard and Smith 2004), or by being associated with an improvement that was happening anyway (Tymms et al. 2005). Area-based initiatives, such as Academies (Gorard 2005a), or Action Zones (Power et al. 2005), have no clearly desirable effect in terms of targeting those most in need (Parkinson 1998). Where initiatives are beneficial in absolute terms, they are not especially effective in reducing inequality. In some cases, the more advantaged students even appear to gain more from such interventions, leading to a temporary increase in inequality.

3.2 Transitions at 16+

What happens at age 16 could be crucial to our understanding of inequalities in HE because ‘many 16 year-olds who stay on do so to gain qualifications for higher education’ (Raffe et al. 2001, p.46). If true, this has two important implications for WP. For many people the decision to enter HE is, therefore, effectively taken several years beforehand. Additionally, the local provision, visibility and take-up of HE could be an important influence on staying-on rates at age 16.

In England, the school-leaving age was raised in 1972 from age 15 to 16 producing an inevitable but not total increase in staying-on in education past 15. A very similar growth in post-16 participation took place in the 1990s despite the lack of legal compulsion. The Youth Cohort Study shows a steep growth in full-time education post-16 after 1989 (Payne 1998). However, this is largely a question of robbing Peter to pay Paul, because government-funding training showed an almost equivalent drop over the same period (from 24% of 16 year-olds in 1989 to 12% in 1994). Other commentators have observed the same, and even today increases in staying-on rates in FE often replace work-based training, and full-time takes from part-time participation (Denholm and Macleod 2003). The total proportion of the 16-year-old cohort remaining in education, government schemes, and employment-based training combined has remained constant for decades, even though the balance between the three routes varies according to the local history of funding and availability.

3.2.1 Making decisions about whether or not to participate

The majority of students in each study of post-16 choice chose to remain in education to the next level, either post-16 or post-18, depending on the focus of the research. This is probably because of the inherent bias in UK education research towards researching the best educated (see Appendix D). Of those who did not stay in education immediately, very few (around 4% in Raffe et al. 2001) would then return in the second or subsequent years. Of those returning, it is generally the best qualified, with the highest level of parental education and support (Hammer 2003). And those who are the least likely to participate in any phase also appear to become the most likely to drop out (Walker et al. 2004). Perhaps unsurprisingly the main determinant

of whether or not they chose to stay on was success in school examinations (Thomas et al. 2001, Croll and Moses 2003, Howieson and Ianelli 2003). Watson and Church (2003) found that potential WP students in Year 10 were generally positive (80%) about HE, but that many were not likely to reach even the GCSE benchmark usually necessary for sixth-form study. They had concerns about finance, drop-out from HE and so on, but since they were unlikely to gain 'suitable' qualifications might not even continue post-16. The level of qualification at 16+ predicts very well a student's educational pathway and later employment status (McIntosh 2003). In this case, the role of purported barriers, such as cost, can only be minimal.

Even so, for the majority of respondents in each study considered here, remaining in education, particularly after the age of 16, was seen as the option of choice. For example, Moor et al's (2004) study of the post-16 destinations of 3,000 participants in the Northern Ireland Curriculum Cohort study, found that 70% of students remained in education post-16, while around 13% entered work-related training, 8% employment, with around 2% unemployed and 4% whose destinations were unknown. Once again the likelihood of remaining in education post-16 depended, to a large extent, on prior GCSE/GNVQ performance. Even in Archer and Yamashita's (2003) study of 20 lower ability Year 11 students from an inner London school, 11 students stated their desire to remain in education post-16, despite being identified as 'unlikely to continue' by their teachers. Follow-up studies with 12 of the students revealed that six were on a college course or involved in work-based training.

There was some consensus about the reasons students give for wanting to participate, with access to a better job being a key reason at all stages (Francis 1999, Barrett 1999, Moogan et al. 1999, Sutton Trust 2002, Connor 2001, Moor et al. 2004). Other reasons included: achieving certain qualifications, the perceived usefulness of education, importance of being educated and the possibility of higher earnings. Archer and Yamashita (2003) also describe the feelings and pressures of 'not being good enough' that were experienced by the less able students in their study.

Three themes emerged to describe the influences that different parties have over the decision-making process: the influence of family, friends and the institution in which the student was studying. Parents were frequently seen as the major influence and encouragement in shaping students' decisions to participate in post-compulsory education in general (Moogan et al. 1999, Sutton Trust 2002, McGrath and Millen 2004, Mangan et al. 2001, Helmsley-Brown 1999, Archer and Yamashita 2003), but also in their choice about where to study and what courses to follow (Brooks 2003, 2004). Often the parents themselves had little experience of HE but were still key participants in the decision making process (Moogan et al. 1999), with some getting their information from work colleagues (Brooks 2003, 2004). Biggart et al. (2004) reported that parents were the single biggest source of advice on continuation (48%), and the reasons given for prospective choices were strongly linked to parents' occupational class. Students from higher managerial/professional classes were much more likely to aspire to HE. Students from manual and unskilled backgrounds were more likely to want to leave school, having 'had enough' and perhaps having been offered a job. It is possible that the promotional material produced by post-16 providers, intended to encourage participation, actually works as a form of occupational class 'marker' (Maguire et al. 1999).

Peers exert a certain amount of influence over the decision to remain in education, particularly post-16 (Thomas et al. 2001, Thomas and Webber 2001), and also over the choice of subject. In Lumby et al.'s (2003) study some students were reluctant to study subjects that were not seen as 'cool', such as science. There was a limited role for schools and teaching staff in influencing students' decisions whether or not to participate (Thomas et al. 2003), and this mainly involved alerting students to the possibility of continuing to higher education in the first place (Moogan et al. 1999). Other institutional influences include the relationship between students who wished to follow an academic route and their choice to remain in their current school rather than move to the local FE college (Mangan et al. 2001).

As with the students who chose to remain in education, there was also some consensus over the reasons why others made the decision not to participate. These young people generally wanted to get a job and begin to earn a wage (Sutton Trust 2002, McGrath and Millen 2004, Helmsley-Brown 1999, Connor 2001, Moor et al. 2004). Other reasons included: not needing to achieve a degree qualification in order to pursue their chosen career (Sutton Trust 2002), and the (non-explanatory) desire to simply stop studying and leave education (Francis 1999, McGrath and Millen 2004).

There was some suggestion that there were financial motivations behind some young people's choices, in particular not wanting to end up in debt. McGrath and Millen (2004) reported six out of 21 respondents citing financial reasons for withdrawing once they had received an offer of a place, mostly before receiving their A-level results. Financial concerns were mediated by personal and private reasons, for example having family responsibilities (Connor 2001). Many students seemed resigned to ending up in some debt; it was a consequence of being a student. There was some evidence, but this was not especially convincing, that financial concerns were more of an issue for students from poorer homes. Several studies raised concerns about levels of financial literacy among prospective students (Connor 2001, Helmsley-Brown 1999), but it was not clear that this was actually a barrier for the respondents.

3.2.2 The role of background factors

Surprisingly few of the studies included in this review attempted to draw a link between background characteristics and aspirations to participate in post-compulsory education. Therefore, the results here are unclear, and point to a range of competing factors. One of the key reasons for this is the limited sample size of many of the studies. For example, Lumby et al. (2003) suggest that Asian students were more likely to aim for professional careers than students from other ethnic backgrounds but it is difficult to draw firm conclusions from a study which included only eight Asian students. In Francis' (1999) study the author considers gender differences between students' motivation for participating. One reported finding is that the girls' decision-making was more likely to draw upon the intrinsic benefits of higher education: achieving a specialism, greater learning in readiness for the world of work, and more options for the future; while boys used more extrinsic explanations such as access to a good or a well-paid job. However, differences were often slight. For example, 16 boys and 15 girls used the argument that post-16 education helps you get a good job.

The findings are no clearer when it comes to the role of socioeconomic status in influencing the decision whether or not to participate. Researchers such as Helmsley-Brown (1999) suggest that there is a link between following an academic (or A-level) route into HE and a students' social group. In her study the students who failed to continue in education post-16 or to enter vocational training were from working-class homes. However, there were relatively small numbers of students involved (seven) and crucially, these students also achieved among the lowest GCSE scores.

On the other hand, Connor (2001) shows that high proportions of students from lower socioeconomic status backgrounds were likely to continue to higher education. Similar results obtained from Croll and Moses (2003) indicated that students overwhelmingly wanted to succeed at school, regardless of parents' level of education. Students from families where parents had no formal levels of qualification were less likely to want to stay on, but these students also had lower GCSE scores. According to Moor's (2004) study in Northern Ireland, social class (as well as grammar school attendance) did not help determine whether individuals stayed on in education or not. As far we can tell here, the key predictor of actual post-16 participation is the current or expected level of qualification.

3.3 Pre-entry interventions for school pupils

This section of the review considers interventions to encourage school pupils to consider HE as an option, as these have been a primary focus of national, regional and institutional interventions in England. The evidence suggests that no single intervention can be identified as making a substantive difference to patterns of participation.

3.3.1 School-based interventions

Pennell et al. (2005) report that 97% of institutions who responded to their survey (67 institutions, 56% of HEIs in England) are making presentations in schools and 94% are undertaking visits to reinforce school links. They found that 70% of HEIs responding to their survey had parent-focused activities. It is therefore surprising that more evaluation of these initiatives has not been undertaken.

McLinden (2003) undertook a longitudinal study of the 'Children into University Scheme' (CINU), which works with secondary school pupils from Years 8-13. The experience consists of a three-day thematic activity – days one and two based in a further education college with a campus visit to a higher education institution on day three. Parents and carers are involved in the scheme and participate in the third day. Following a pilot in 1999, the scheme ran in seven locations across Cambridgeshire, Essex, Norfolk and Suffolk in 2000, and by 2003 this had been extended to 16 locations. Data was collected from the young people using a series of five questionnaires, and some group interviews were used. A total of 200 students participating in the scheme took part in the survey and interview phases of the research. The authors found that students were focused on post-16 as opposed to post-18 decisions. Thomas and Slack (1999, 2000) found that interventions in Year 9 had a limited impact in influencing future decisions in relation to education and training but a greater impact in relation to self-reported career aspirations. They evaluated three

years of a school-based initiative in North Staffordshire aiming to raise the aspirations and achievement of Year 9 pupils through inspirational speakers, a series of school-based music and dance workshops, and a public performance.

Unfortunately, like much of the research on school interventions to widen participation, these studies explored staff and pupils' perceptions of interventions, as opposed to their actual effectiveness. Additionally, none of the research addresses the efficiency of the interventions – a major blindspot for the whole field.

This limited research on school-based interventions suggests that to have the greatest positive effect on young people:

- Targeting has to be explicit and overseen by the intervention rather than the school, otherwise the intended beneficiaries may be excluded and others included (Thomas and Slack 2000, Woodrow et al. 1998). Some evidence suggests that some pupils are better able to take advantage of activities, and without careful targeting the gap between groups of pupils may increase.
- Activities have to be of interest and relevance to the young people (Thomas and Slack 1999).
- Activities need to be interactive and engaging. Greater Merseyside Aimhigher (2003) found that practical, hands-on activities, project/problem based activities, team work in small groups with an undergraduate facilitator were more engaging, in the view of staff and pupils.
- School cultures and activities have to reinforce widening participation interventions (Morris et al. 2005).
- Need to involve parents in activities: in Year 9, parents (Thomas and Slack 2000) and particularly mothers (McLinden 2003) were considered the main influence on young people's decision making.

3.3.2 Summer schools and residential experiences to raise students' aspirations towards HE

Pennell et al. (2005) report that summer schools are the most frequent WP activity undertaken by the English HE sector – mentioned by 99% of responding HEIs. In common with school-based interventions, much of the research about summer schools and residential experiences has focused on students' perceptions of their experiences and their intended actions rather than actual outcomes in terms of participation, retention or qualification. The studies reported here indicate that residential experiences and summer schools encourage students to consider progressing to HE. No data is presented about how many do subsequently enter HE, or how this differs to the progression rates of non-participating students.

Liverpool Hope University has researched the impact of residential experiences for Year 9 and 10 pupils with little or no HE family background (Atherton and Webster 2003). Responses from participants indicate a large impact as a result of this intervention, with 84% self-reporting that they are 'more likely to go onto HE'. This data is supported by follow-up interviews with pupils, that show a high level – 93% – of transition to further education or sixth form college, and 77% intending to go into HE. Ninety-one percent of the respondents cited the project as 'quite' or 'very important' in reaching this decision. Further research at Liverpool Hope University

(2003) reports a limited and small-scale evaluation of a residential course for 30 disabled students using student and staff questionnaires. In this study the majority of students indicated that being at Hope had made them 'more likely to come to university'. However, there is no comparison group.

Edmonds et al. (2003) sought to assess the extent to which non-qualifying summer schools have recruited students from the appropriate target groups. These were defined as those at FE college, aged 16–30, with parents with low educational qualifications and non-professional occupations. This research employed an analysis of application forms, end-of-course student questionnaires, visits to summer schools, and follow-up telephone interviews with students. The study provides insights into what the students found the least and the most satisfactory, and 78% of students said the summer school helped them 'a lot' or 'a fair amount' to reach a decision about going on to HE. Again, this project tracks whether the students apply to higher education, but it does not discover whether or not they enter HE, or what happens to them subsequently.

3.3.3 Undergraduate role models and mentors

According to Pennell et al. (2005) 81% of HEIs have a student ambassador scheme, 69% run student mentoring programmes and 64% organise school pupil tutoring by undergraduates. Given this volume of activity, it is surprising that relatively little seems to be known about the impact of undergraduate ambassadors, role models, mentors and tutors.

McLinden (2003) suggested that role models helped young people to feel that university could be an option for them, and recommended that mentors played a greater role in the delivery of any programme. Knox and McGillvray (2005) also noted the importance of student tutors on their 'First Steps' programmes preparing students for HE. The Talent Support Strand of Aimhigher Greater Merseyside distinguished mentors from advocates, who work at a group rather than individual level. Research with advocates (semi-structured group discussions) suggested that this approach was beneficial to both HE and school students. This is supported by the work of Austin and Hatt (2005) who used a mixed methodology of questionnaires, focus groups and face-to-face interviews to collect data from school students, student ambassadors and staff in higher education institutions about the impact of student ambassadors. The study suggests that employing student ambassadors brings benefits to the higher education students as well as to the young people with whom they worked. Working as ambassadors improved students' self-esteem and self-confidence, developed their transferable skills so that they could operate more effectively as learners and gave them valuable experience to improve their position in the graduate labour market. These studies indicate that involvement as an advocate/ambassador has a positive impact on HE students, and is likely to be beneficial to school students, but the actual benefits of role models is under-researched and difficult to quantify. They appear to be a useful addition to a scheme working with young people in school.

3.3.4 Pre-entry suites of activities for school students

There has been a growing movement towards suites of pre-entry activities, offering more sustained interventions with young people at different stages of their schooling.

In England much of this activity is captured in Aimhigher (and previously in the Excellence Challenge and Partnerships for Progression). Similar approaches can be seen in other countries, for example activities organised by the regional forums in Scotland (Sinclair and McClements 2004, Woodrow et al. 1998) and institutional strategies in Ireland (Osborne and Leith 2000).

Recent research by Morris et al. (2005a) sought to analyse the impact of Aimhigher: Excellence Challenge pre- and post-16 interventions on young peoples' aspirations towards entering higher education. The Excellence Challenge targeted young people mainly from households with no tradition of HE through attainment and aspiration raising activities and by providing Opportunity Bursaries. Questionnaires were administered to Year 11 pupils, and again in post-16 follow-up. The responses indicate that successful transition at 16 is more likely for those who took part in targeted educational interventions, and who also had access to good careers education and guidance. The conclusions are tentative rather than definitive. In particular, financial concerns may deter some students from continuing in education in spite of interventions.

In a related study Morris et al. (2005b) conducted a large-scale longitudinal evaluation involving young people, schools, further education colleges, higher education institutions and Aimhigher partnerships. Data was collected over two academic years from 19,998 Year 11 and 17,116 Year 9 pupils. Background characteristics at school and pupil level were controlled for, and regression techniques were used to identify very small associations between policy interventions and pupil attainment. Similar evidence is presented by Emmerson et al. (2005) in relation to Aimhigher: Excellence Challenge pre-16 interventions using comparisons between participating and comparator schools. Being part of the Aimhigher: Excellence Challenge programme had a positive impact on attainment, but did not increase the proportion intending to participate in HE in Year 9, although by Year 11 both attainment and aspirations had increased. Morris et al's (2005b) analysis specifies which interventions at particular key stages had higher than expected impact on levels of attainment associated with them, including being identified as part of a targeted cohort, participating in summer schools and university visits and discussing higher education with university staff and students, friends and family.

The findings suggest that the most effective strategies in raising attainment and increasing pupils' aspirations are those that are part of an on-going programme of events which expose pupils to realities of all aspects of university life. This is reinforced by the school ethos that promotes aspirations to progress to higher education, and the engagement of parents.

Scottish research (Sinclair and McClements 2004) tracked all students participating in the Lothians Equal Access Programme for Schools (LEAPS) through to the first year in higher education. LEAPS is a widening access programme involving a range of partners and four higher education institutions. It is designed to increase the participation of pupils in higher education, whose opportunities have been limited by economic, social or cultural factors. It runs a range of activities to increase students' and parents' information and advice about HE, provide impartial information about courses and HE routes, raise aspirations about HE and promoting positive attitudes to learning and learning skills to facilitate the transition into HE. The research

interviewed 928 pupils using the pre-entry application service. Of these, 509 students are known to have progressed to HE, and 328 of these went to institutions in the region and could be tracked. The analysis found that no individual factor had a statistically significant effect, but rather a number of factors might be significant in combination: previous qualifications, family background, summer school attendance and subject studied.

Hereward College, the National Integrated College for Disabled Students in Coventry, implemented and evaluated a widening participation project to facilitate disabled students, particularly those with complex learning support needs, to enter higher education. The main thrust of the activities was to 'close the gap' between further and higher education. Activities included partnership days, a summer school, and insight weeks, which were designed to bring disabled students into the higher education ethos, and vice versa, and to make university staff more aware of the needs, opinions, hopes and fears of potential students with complex difficulties. Interviews with participants suggested that the programme of activities was an effective way of increasing the numbers of disabled students who subsequently made successful applications to higher education from the college, with an increase of 300% over a three-year period (Taylor 2004). Again, however, there is no control to show how specific this growth is.

In summary, there is limited evidence about the effectiveness of different pre-entry interventions with young people. Much of the research in this area has focused on students' perceptions of interventions, rather than tracking them into HE. Students report that residential activities encourage them to attend HE. Where more in-depth research has been undertaken, the evidence suggests that it is not possible to identify specific causes and effects of interventions.

3.4 Pre-entry interventions with adults

There appears to be even less research evaluating the impact of pre-entry interventions with adults. This is likely to reflect the current funding priorities in England which focus on young people, the fact that many adult interventions are not targeted at access to HE but at engagement with learning opportunities more broadly, and the type of literature submitted to this review.

Progression through Partnership is a project which aims to provide opportunities for people living in disadvantaged communities in south east Wales to progress from Level 2 to Level 3 qualifications and from Level 3 to Level 4 (HE) study. This is undertaken by delivering learning opportunities in community venues. People and Work Unit (2004) have evaluated the impact of the project in terms of widening participation and enabling progression to HE, sending a postal questionnaire to 45% of the learners – 394 in total from which only 55 responses were received. This is an extremely poor response rate leading to considerable danger of being misled in working with the results. In addition focus groups and interviews were conducted. This limited data indicates that the project was successful in encouraging progression to HE, but again reflects intentions to progress, rather than actual rates of transition. The research also identified concern about the accuracy of targeting learners, as a large proportion of learners already had higher level qualifications anyway.

James and Preece (2002) undertook student tracking research to identify the common results and experiences of over 2,000 learners who attended a community delivered ICT course and who had childcare responsibilities. A high percentage of respondents went on to further study and/or paid employment, including 22% who progressed to HE level study. A majority of respondents felt that the effects of the course were 'immediate', 'longlasting' or 'life-long', and 'important'.

The Action Learning in the Community project sought to explore innovative ways of widening participation via experiential learning, including in the community (Mayo 2002). The study used an action research design, including evaluation, to examine the effectiveness of the project interventions to improve the employability of long-term unemployed participants via experiential learning. The research indicated that this modified approach succeeded in facilitating access to HE for disadvantaged adults, as part of holistic strategies, despite the disincentive of student fees and lack of maintenance provision. However, the research report contains no information about even the size of the sample.

In summary, community based interventions are claimed to be successful in reaching some adults who are able to progress to HE, but the research data on progression is very limited. Interestingly, many of these learners report wider benefits than HE progression. For example, Panesar (2003) researched the experiences of Asian women on targeted courses. The learners' testimonies illustrate some of the wider benefits of participating in learning: integration into the wider community, awareness of different cultures, adjusting to life in Britain, friendship, learning that others are in similar situations, drawing support from each other, and empowerment through the skills and knowledge learnt.

4. Evidence from the transition to HE

Summary

In all the UK home countries, there are more applications for HE from students from social classes I and II, and so these are over-represented in the take-up of HE. In terms of the threshold of entering HE or not (rather than allocating places at specific HEIs), the admissions process is at least neutral or even favours those from less elevated backgrounds. However, applicants are faced by constraints that influence their choice of institution and course within HE. These include: geographical constraints, cultural constraints, qualification level and type, and vocational relevance.

There is a lack of awareness amongst HE applicants of admissions practice, particularly in relation to the variance between published entry requirements and those that may be accepted later. Students entering HE have to learn to ‘play the game’, which is more of an adjustment for non-traditional students, particularly those entering with vocational qualifications. Disabled students may face particular limitations in relation to social participation. Many, especially mature, students report wanting a longer induction period offering a more supportive programme and providing a more comprehensive introduction to study requirements.

Access courses, Level 0 programmes and work-based learning routes, and access for students with no prior qualifications, offer some students opportunities to enter HE. Once in HE, these students do as well as peers who have entered via more traditional routes. Foundation degrees are successful in attracting non-traditional learners. However, it is not clear whether they are attracting new learners, or those who would have accessed other types of HE provision anyway. Studies suggest that attendance at pre-entry summer schools enhances student’ retention and success in higher education in the first year and beyond. Induction programmes can offer similar benefits to pre-entry summer schools in supporting students to make the transition into HE.

Debt is rising amongst UK students and recent graduates, especially for disabled students and those from working-class backgrounds. Around 30% of current students are seriously worried about the debts incurred in university study, and there has been an increase in the number of students expressing regrets about going to university since the introduction of tuition fees. There is no direct evidence on the importance of financial constraints in deterring HE participation. Lack of funding, lack of certainty about access to discretionary funding, and the complexity of student funding may act as barriers to entry, especially for older, low-income students with dependents. Hardship grants have not equalised finances across students, but do appear to have a positive psychological impact, reducing students’ fear of debt. Bursary support has a positive impact on retention.

In the next four sections, evidence is sometimes structured according to our ‘map’ of expected areas (see Section 2). This means that some elements are very brief, and that

some studies are repeated in different sections. In this section we summarise some of the evidence about the processes of application, admission and transition to HE.

4.1 Transition to HE

4.1.1 Factors involved in transition

Sources of information on higher education

In a large scale study involving Year 11 school students, Connor et al. (1999) claimed that for many students the process of choosing an institution and course was both complex and difficult. Lack of access to good advice and support has been suggested as a barrier for under-represented groups (Universities & Colleges Admissions Service [UCAS] 2002, Thomas et al. 2002). A-level applicants of non-traditional backgrounds within schools were found to be on track to get to HE, even though they may have struggled to obtain this position.

In relation to sources of information used by applicants, IT-based media resources were the least used while prospectuses and visits/open days were rated the most helpful. Formal and informal advisers also played an influential role. Different applicants, however, have access to and use different sources of information, some of which may offer less useful advice and guidance. Research carried out by UCAS (2002) found that while most students attended open days, GNVQ students were less likely to have done so. Such students were found to have been more influenced by their friends and families. Some evidence was also found that the cost of travel deters some students from attending open days. This and the inflexible times were particular deterrents for mature and rural students. Connor et al. (1999) found that mature students were more likely to have experienced visits from university representatives but overall used a narrower range of sources than younger (under 21) students – being less likely to use guides or careers fairs but equally likely to use the internet or websites to access information. Research and teaching quality assessments were used more widely by applicants from higher social classes.

The key variables in supporting application to HE were identified in the UCAS (2002) research as family influence, personally knowing others of a similar background in HE, and school and college support. Encouragement from school and college staff can be useful in inspiring HE aspiration and application. However, the opposite can also be true, and the authors note that some careers staff and teachers were not up-to-date with their knowledge of HE, and advice was sometimes mis-informed or ill-advised. This is supported by Quinn et al. (2005) in their research with young people who had withdrawn from HE without completing their studies. Similarly, Bowl (2001) found in her research with mature ethnic minority students on a pre-HE community based course, that the students were disadvantaged in terms of advice and support from home and that this was not compensated for by official advice, support and guidance. Different levels and direction of formal information, advice and guidance are apparent. The UCAS (2002) study found that sixth form colleges offered the most support, whereas FE colleges appeared to offer a lower standard of institutional support. However, the authors note that individual tutors were making clear differences in some instances. Research by Reay et al. (2001) suggested that private

schools offered more intensive careers advice, with a relatively narrow focus pushing towards Oxbridge and other elite institutions.

Choosing an institution and a course

Clearly a number of factors are involved in choosing an institution and a course, and different students prioritise different factors. Reay et al. (2001) note that geographical constraints (e.g. the cost of living away from home and the costs incurred in commuting) were present in working-class narratives of choice, but absent from those of the middle class students. Connor et al. (1999) suggest that teaching, academic support, facilities, overall image and employment prospects are all important in determining choice. However, non-traditional students, particularly mature and ethnic minority applicants were found to place more emphasis on reputation and quality, location and distance from home. A lack of access to local HE was identified as a barrier for students in rural and coastal areas in North Yorkshire, although traditional students did not feel the same constraints (UCAS 2002).

In a relatively large-scale study involving young people from disadvantaged backgrounds, Forsyth and Furlong (2003) found that cultural barriers were implicated in every stage of the decision making process: from whether to stay in post-compulsory education through to which institution and what course to take. Awareness of class meant that some young people applied to new universities rather than more elite institutions, and for less prestigious courses. The exception to this was where students' overriding concern was to stay local. Other studies indicate that many students had chosen institutions where they felt they would 'fit in'. Leathwood and O'Connell (2003) and Read et al. (2003) found that the non-traditional students in their research had chosen institutions where they felt they would not be different. For the mature students this was because they were fearful of being socially and academically inadequate compared to younger students. Those participating in this research had chosen a post-1992 institution because it was perceived as being friendly, less formal and multicultural. For the students from minority ethnic backgrounds taking part in this investigation, there was a fear that a lack of diversity in some institutions could engender feelings of isolation. Research by Reay et al. (2001) indicates that students strive for a sense of belonging. Examples include applicants from ethnic minority groups seeking an ethnic mix, mature students seeking institutions with others like themselves (see also Murphy 2000).

On the other hand, students were also aware that they were, to some extent, taking a financial risk in obtaining a degree from an institution that may be less highly valued than other more prestigious institutions, but did not see themselves as the type of students the latter would want. Reay et al. (2001) note that for some working-class students, attending an elite institution was seen as an opportunity to escape from their present situation. More familiar institutions were seen as places to avoid. So different small-scale studies lead to rather different conclusions about a central question for WP research. Should the system change to accommodate different types of students, or would the changes entailed damage the HE experience that non-traditional students aspire to? Overall, the evidence for either position is weak, and often presented by authors uncritically. What is clear from those studies that factor in the prior qualifications of students, is that qualifications are key in explaining differences in rates and types of participation (Reay et al. 2001, UCAS 2002). Leslie et al. (2002) note that the ethnic minority groups in their study had a larger proportion of

vocational qualifications as their entry requirements which acted to restrict the courses and institutions open to them.

A number of the working-class young people saw their time in HE as an apprenticeship and were likely to choose a vocational course rather than one that they enjoyed or were talented at. In addition, some chose to do an HND or FE course rather than a full honours degree due to the extra cost incurred in longer courses, particularly if their parents were unable to provide financial support (Forsyth and Furlong 2003).

Application and admissions procedures

For the majority of students the application and admissions procedures are perceived as time consuming and boring, but differences are apparent in the extent to which students feel supported during this process. The same research suggests that there is a lack of awareness amongst applicants of admissions practice, particularly in relation to the variance between published entry requirements and those that may be accepted later, and that this disadvantages some applicants (UCAS 2002). Mature students felt that the UCAS form was geared towards younger students and the focus on qualifications served to undermine confidence and fostered anxiety.

A number of studies have analysed data on acceptance rates for ethnic minority applicants. Shiner and Modood (2002) found that applicants from ethnic minority groups (with the exception of Chinese applicants) had a lower rate of success in terms of initial and firm offers, but were 1.5 to 2.5 times more likely to be accepted via clearing, and more likely to apply to a local university than white applicants. The authors note that in terms of A-level points, the academic performance of applicants from ethnic minority groups meant that they were in a poorer competitive position for university places. Drawing on the results of multivariate analysis, the authors suggest that it is academic outcome that impacts upon success; the probability of successful application increased with improved A-level scores. In addition, they suggest that ethnic minority candidates are concentrated in new universities which respond more positively to their applications. Leslie et al. (2002), using 1996-2000 UCAS data, suggest that there was no discrimination against ethnic minorities with A-levels, it was the lack of such qualifications that seemed to be the key to different acceptance rates. A smaller proportion of the applicants were found to have two or more A-levels, and overall lower A-level scores than whites (although the reverse was true for Chinese applicants). In addition, a higher number of applicants had vocational qualifications.

Tables 4.1 and 4.2 show that, as far as available data show, across the UK home countries the reason that social classes I and II predominate in HE is that they predominate in applications for HE. These figures make it clear that the inequity in access to HE in general, where it occurs, does not take place in the admissions process. In fact, acceptances to HE (Table 4.2) are slightly more balanced in terms of social class than applications (Table 4.1). If anything, the admissions process favours classes III-N-V but this difference is very small compared to the growth from application to acceptance of those whose social class is unknown. Again, the evidence from Section 3 suggests that the surface inequalities largely pre-date the HE transition process. Can anything be done, by this life stage, to overcome inequalities in the rates of admission?

Table 4.1 – Applications HE 2001/02

Class	England	Wales	Scotland	NI	UK
I/II	52	53	55	42	52
IIIN-V	36	37	35	48	36
Not known	12	10	10	11	12

Source: Gorard (2005b)

Table 4.2 – Accepted HE 2001/02

Class	England	Wales	Scotland	NI	UK
I/II	50	50	51	44	50
IIIN-V	35	37	35	46	36
Not known	15	13	15	10	15

Source: Gorard (2005b)

The transition period

The transition to HE is frequently perceived as a fraught process for the majority of students, but especially non-traditional students. A common theme in many of the studies involving students from under-represented groups is that of learning to ‘play the game’. For example, mature minority ethnic students in Bowl’s (2001) research talked of the problem of understanding the rules of academia and tended to blame themselves when they failed to do so. Similarly, entrants from vocational routes who performed less well in HE compared to those with A-level qualifications took time to learn ‘the rules of the game’ (Hatt and Baxter 2003, p.18). Their previous educational experience had focused on developing skills that did not prepare them for the methods of assessment involved in academic HE programmes. In contrast Access course students and franchise students involved in the research had participated in courses geared towards preparing students for entry to specific degree programmes. As a result these students had developed study skills, had regular contact with a liaison tutor, and visited the higher education institution (HEI) for lectures. The A-level, Access and franchise students were aware of the rules of the game in terms of assessment. Furthermore, they were prepared for the social transition involved in the move to an HEI as a result of visits between staff and students, and an existing informal peer support network. Students with vocational qualifications have to make both transitions: from vocational to academic programmes and from FEC to HEI. Evidence indicates that mature students experience difficulties making the transition to HE (Reay et al. 2002, Bamber and Tett 2000, 2001, Bowl 2001).

Forsyth and Furlong (2003) found that young people had a lack of prior knowledge of what student life involved. Consequently they were unprepared for the amount of free time they had and were unsure of how to manage this productively. Participants in the UCAS (2002) study expressed similar sentiments and felt they were under prepared for the transition from a ‘cosseted learning style to mass independent HE’ (p.30). Quinn et al. (2005) reported similar findings in a study of young working-class people who failed to remain in HE. Likewise, evidence of a lack of knowledge of the reality of student life was found in smaller studies of one post-1992 institution by Leathwood and O’Connell (2003) and another by Read et al. (2003). Both found that non-traditional students (which included mature, first generation entrants and ethnic minority students) felt they were expected to be too independent too early and were shocked by what they felt was a lack of supervision and guidance. Further anxiety

was created by not knowing what was expected in assignments, not knowing how to structure academic writing, and exam standards (Murphy and Fleming 2000). A number of examples of good practice are noted in the UCAS study (2002) – mentoring systems involving completing first year students and new entry students where contact was established prior to entry; the Flying Start Bridging Programme at the University of Central Lancashire, particularly successful in supporting GNVQ students through the transition to HE. Overall, participants in the research wanted a longer induction period which offered a more supportive programme providing a more comprehensive introduction to study requirements (Elliott 2002).

Challenges

Bamber and Tett (2000, 2001) identify various challenges that mature, working-class students must first face and then overcome in order to become successful in HE. They suggest that institutions need to be aware of the social and economic context of these students' lives and take this into account both in the curriculum and in the emotional and practical support provided. Leathwood and O'Connell (2003) note that for non-traditional students there is no linear developmental path. Instead some students move in and out of their studies, swapping from full-time to part-time study and vice versa because of their socio-economic circumstances. Mature students in other studies have expressed concern over issues of inadequate funding, lack of childcare and the unresponsiveness of educational institutions, seeing HEIs as geared towards those with no family responsibilities (Bowl 2001, UCAS 2002). Similarly, factors involved in success have been identified by mature students as: finances, relationships with partners, other external commitments, support from the institution and the type of Access route taken (Murphy and Fleming 2000). Many mature students (particularly women) have to develop strategies to continue studying while balancing childcare (Bowl 2001, 2002). Furthermore, failure to maintain the balance and make the transition to HE is frequently put down to personal reasons rather than linked to processes and structures beyond the control of the individual (Reay et al. 2002).

At the point of acceptance and entry to HE, research suggests that students need to develop a sense of entitlement to participate in HE, rather than seeing this as a privilege (Bamber and Tett 2000, 2001, Tett 2000, Leathwood and O'Connell 2003). Students from communities where participation in HE is not the norm feel that they are doing something which is 'breaking the mould', which may act as a barrier to full engagement with their course of study. Conversely, they may feel a responsibility to do well which acts as a motivator. Mercer and Saunders (2004) also talk of how, during the transition period, mature, working-class students balance the fear of failure against the chance of academic success and development. Mature students, particularly women, may doubt their ability and lack confidence in speaking out, and experience feelings of guilt or selfishness (Leathwood and O'Connell 2003, Redmond 2003).

Drawing on an in-depth study of the experience of students with a disability, Hall and Tinklin (1998, 1999) highlight a number of factors that impact on transition into HE. Similar findings were also reported by Thomas et al. (2002). Hall and Tinklin (1998, 1999) found that the transition process for many of those participating in their study was difficult and created additional stress and anxiety. For some students, their disability can mean that they have a finite source of physical and emotional resources which will impact on their social integration. For example, locating parking places,

specific offices and individuals, repeating requirements to different staff and departments all use up energy and time leaving less of these resources to invest in social activities. This situation is exacerbated if the institution is not aware of individual student's needs prior to arrival. Students involved in the research felt that they had to undertake a process of negotiation with the institution in order to meet their individual needs.

Access to services and facilities was also identified as a barrier by part-time students (Kember et al. 2001). Whilst full access/entitlement to services facilitates transition and integration, restricted access acts as a barrier. Furthermore, perceived status comes into play in that part-time students do not feel valued as highly as full-time students if they do not have access to the same services. Sanderson (2001) called for a better system to support disabled students in the transition from FE to HE and highlighted a need for better communication between the two sectors: more detailed and clear information for students delivered at the same time as information for non-disabled students; and a named person or key contact within institutions. The latter is also highlighted as good practice by Thomas et al. (2002). Mentoring systems were identified by participants as important in breaking down feelings of isolation and loneliness.

The difficulties experienced by disabled students can be compounded by physical restrictions, which make it harder for them to meet people in the first important few weeks. Consequently, the integration period can be more problematic for some disabled students (Hall and Tinklin 1998, 1999). This difficulty can continue beyond the transition period. Riddell et al. (2004) identify the pressure of work and lack of support as barriers to participation in social activity. Students also experienced problems identifying with the wider student body. This linked not only to the nature of their disability, but also to other differences such as class and age. The authors emphasise the interaction between these factors and the institutional culture; students who share a similar cultural background to that of the institution found that other problems were reduced. Again this demonstrates the diverse nature of the disadvantage experienced by some students.

Integration

In research with mature, working-class students Bamber and Tett (2000, 2001) identify the following as important in successful integration. First, it is important that there is a change in the student's disposition towards the course, which is usually experienced around the end of their first year. This represents a turn towards academic culture and a realisation of the value of this in relation to a student's 'real' life. This is defined as seeing the value of being working class within a middle-class environment, rather than being submerged and intimidated by the latter. Second, it is important that the student develop an understanding of the relationship between theory and practice. This tends to be experienced in the final year of study and involves a recognition that a student's past experience relates to their academic study. Finally, towards the end of their study students experience changing attitudes towards gaining a professional qualification. This is described as a move from being concerned with having a qualification towards being professional. Tension arises for working-class students around this issue because attributes associated with being a professional are perceived as undesirable in the communities these students live in.

Forsyth and Furlong's (2003) research explored barriers that restricted integration for younger people from disadvantaged backgrounds. It found that these barriers impacted more on students enrolled on more prestigious or advanced courses. They highlight the following factors, some of which are also supported by Quinn et al. (2005):

i) *The impact of financial issues* Lack of finance can have indirect as well as more direct impacts. For example additional costs are incurred in relation to both time and cash if students have to travel in to university. As a consequence, lack of time or money and fatigue means many students were missing out on social activities. Some were aware that they were missing out, would have liked to participate more fully in what was perceived as the traditional student experience and felt that this would help them to fit in more fully. Others felt that certain students could be 'cliquey' and consequently, tended to seek out those students who they felt came from more similar backgrounds to themselves.

ii) *Social isolation* Students who were unable to find or fit in with other similar students were in danger of becoming socially isolated which ultimately could impact on their confidence and commitment to their course. Kember et al. (2001) also found that part-time and distance learners lacked time and opportunity to meet fellow students. As a result their sense of cohesiveness as a cohort of students was reduced. Redmond (2003) reported similar findings in research with mature students who not only lacked the time and money to socialise, but felt conspicuous in places such as the Students' Union. Rhodes and Nevill (2004) also found that men generally expressed more positive attitudes towards the factor 'access to university social life'.

iii) *Living at home* Those students who remain living in the family home (the majority of the participants in both Forsyth and Furlong 2003 and Quinn et al. 2005 studies) experienced certain restrictions. The extra financial cost of travelling in terms of time and money limited the extent to which they could become involved in social activities (Wilson 1997). In addition, many worked part-time outside the university, further restricting the amount of time they had available. Holdsworth and Patiniotis (2004) highlight the difference in experience between home and 'halls' students (primarily young students). Home students see university as an extension of college, just a change of bus route and have little interest outside of attending lectures. Those who do seek to become involved find themselves trapped between the university where they feel they may not fit in, and their old community.

iv) *Conflicts of identity* Working part-time outside the university led to some working-class students feeling that their sense of identity was compromised and that they were more 'worker' than 'student' which could lead to a loss of commitment and in some cases withdrawal. Furthermore, many experienced an 'inverse snobbery' and found the identity of 'worker' more attractive. The work ethos was experienced more strongly by males and particularly those from disadvantaged communities. Negotiating conflicts of identity was also evident in research with mature students by Mercer and Saunders (2004) and Redmond (2003). The students, who were predominately women, felt that a lack of understanding created conflict between their home and university environments which in turn could create feelings of isolation. In order to overcome this tension, students strove to develop a dual identity, keeping

both 'halves' separate, or by seeking out those who understood their situation. This led to changes in social networks and the loss of old friendships.

There may also be a tension between the concept of a traditional student as compared to a mature one (Reay et al. 2002, Redmond 2003, Holdsworth and Patiniotis 2004). Becoming the traditional younger student meant a combination of independence and dependence, leisure and academic work, and as such was alien to mature students. For the latter, becoming a student meant sacrificing their social life and trying to satisfy competing domestic, academic and work demands. Again, this could be particularly problematic for women.

iv) '*Fitting in*' Students had a lack of confidence in their ability to cope and experienced feelings of being 'at odds' with the institution, other students and staff (Wilson 1997). This was particularly true of those students studying at elite institutions (Forsyth and Furlong 2003). Even where there are higher numbers of non-traditional students within an institution, feelings of isolation are still evident because these could be due to the culture of the academy rather than the student body. Factors associated with this are the size of the institution, moving from building to building, different formats for learning e.g. large groups and lectures to small groups and tutorials (Read et al. 2003).

Research in the US has shown that African American and ethnic minority students feel marginalised or alienated from the ethos or culture of the HEI, experiencing a sense of isolation that they felt other students did not share (Gossett et al. 1998, Bowl 2001). Moreover, US research found that non-African American students' perception of the African American students' experience was more positive than the latter's own perceptions (Gossett et al. 1998).

In relation to successful integration, students with a disability were also clear that they wanted a level playing field, they did not want to be singled out as different by academic staff or students or labelled as a 'problem' (Hall and Tinklin 1998, 1999, Thomas et al. 2002). Students emphasised the importance of approachability and an open door policy and found it daunting to challenge individual staff or departments. Riddell et al. (2004) found that disabled students received different levels of support from academic staff. Hall and Tinklin (1998, 1999) also suggest that students' with a disability received different treatment across different departments in the same institution. This is frequently linked to the personal experience of the staff involved rather than any specific training (Kember et al. 2001). Indeed, it was felt that many academic staff may want to help but were unsure of how to do so without causing offence. Students' relationship to the department and the institution stems from and builds upon this initial relationship. Unfortunately, as discussed above, non-traditional students may be forced by their financial circumstances to move in and out of their studies, with the consequence that staff may not have time to develop relationships with them (Leathwood and O'Connell, 2003). This also impacts on their ability to become part of the student group and to participate in social activities.

4.2 Motivation for studying at HE

Research indicates that a student's decision to study in higher education is influenced by a range of complex social and psychological factors pertaining to the individual (Davies and Williams 2001, Winterton 2004). It also offers evidence that such factors impact upon a student's experience upon entry into higher education. A number of studies were found within the review literature addressing this issue (Draper 1997, DiGregorio et al. 2000, Haggis 2003, Richardson 2003, Haggis 2004). Collectively these studies refer to a range of factors that impinge upon a learner's decision to participate in higher education, including: financial considerations, lack of confidence, time (fit with other commitments), lack of information, and travel /childcare (McGillivray and Knox 2005).

Collier et al. (2003) found that competing responsibilities and preference for earning money were key reasons for non-participation among potential applicants and Ulrich (2004) similarly found that potential entrants to higher education perceived time or financial commitment to be the main barriers to their participation. Additional factors were identified by Schuller et al. (1997) in the form of employer support (financial or time off) for those undertaking study whilst in employment. The importance of future employment was raised by Kay and Sundaraj (2004), who found a desire to improve their career prospects or change career paths was the predominant motivation amongst mature students. They also noted that these motivations were reflected in students' choice of course. The work of Macaro and Wingate (2004), highlights the need for courses to be matched to the aspirations of students.

A common factor amongst studies categorising students' motivation to enter higher education is finance – a factor which is particularly pertinent given the current climate of mounting higher education costs. Glover et al. (2002) conducted a survey with 400 students on commencement and on completion of their university course and found that economic motivation was more important to students than the pursuit of knowledge. The authors argue that simply graduating from university is not a sufficient basis for continued personal and institutional investment in higher education and as a result, higher education courses will be expected to be increasingly directed towards future employment. The study by Winn (2002) highlights the diversity of student circumstances, the complexity of the relationship between students' lives and their academic work, and the difficulties faced by academic staff in providing a learning environment to meet a wide range of student needs. Winn argues that efforts to enhance student motivation, through the use of teaching, learning and assessment strategies, will have limited effect unless the Government looks to target effective financial support to students with childcare responsibilities and provide greater incentives for part-time study.

Studies considering student decisions pre-entry provide a number of important implications for universities in addressing widening participation. Collier et al. (2003) believe that university widening participation policies would do well to take more account of the personal motivations of students, their attitudes to university education and their competing responsibilities. McGillivray and Knox (2005) contend that a key way in which the Scottish Lifelong Learning Strategy will be achieved is by ensuring

that prospective students are ‘given the information, guidance and support they need to make effective learning decisions’ (p.72).

The Glasgow Access to Primary Teacher Education Project aims to assess whether ‘direct intervention to assist pupil motivation and study would result in non-traditional pupils gaining confidence to apply for university’ (McPhee and Skelton 2002, p.25). The project supported students through liaison and input from school and University staff rather than targeted Access schemes (such as summer schools) or adjustment of entry requirements. Motivation and positive self image are seen as being key to academic success (p.31). As a consequence, the project directors argue that more work should be done with pupils from low participation communities to encourage them to view higher education as appropriate where it fits with their career aspirations. Loots et al. (1998) report on the Learning at Work (LAW) project at the University of Stirling, which offers a work-based Access course for entry to HE for unskilled and semi-skilled staff in employment. The scheme involved 24 students with two employers, and some students progressed to HE. But a major difficulty was the high level of drop-out from the Access programme, which the authors postulate is due to relatively low levels of motivation (as all usual barriers to participation have been removed) and the long term commitment required (compared with shorter-term gains from other courses).

4.3 Compacts and special admissions arrangements

Compacts and special admissions arrangements are defined by the National Compact Scheme Project (2005) as ‘The provision of opportunities for conferring some advantage in the admissions process (including the making of lower than standard offers) on individuals in disadvantaged circumstances or from disadvantaged backgrounds’. Special admissions arrangements, and in particular compacts, are used by just under 70% of HEIs (Pennell et al. 2005). Despite the use of compacts to promote admissions to HE for students from non-traditional backgrounds, the National Compact Scheme Project found little evidence about their effectiveness. Few HEIs have data on the retention rates or on-course achievements of compact students.

The University of Glamorgan has operated a compact scheme for a number of years, which has been extended to include additional activities to assist transition and improve student retention. The compact scheme includes an introduction to university through ‘Aiming for College Education’ days, student tutoring, on-campus work-experience, master classes and study skills support. A points reduction and guaranteed place is offered to pupils who fulfil the compact criteria. Wakely and Saunders (2004) have undertaken tracking analysis of Level 1 undergraduates who entered the university through the compact scheme. The analysis compares 77 compact undergraduates with a matched pairs control group. The research aimed to address the issue of differential achievement at the end of Level 1. There was no difference between the groups in terms of averaged module marks at the end of Level 1. But, the study concludes that compact applicants have higher conversion rates than average, have better retention rates and achieve a higher rate of direct progression to Level 2 study. Along with other studies discussed in this section of the review, the research raises the question of whether the lowest participation groups are actually being *recruited* successfully to the compact scheme in the first place.

4.4 Alternative entry for mature students

A number of studies have evaluated the effectiveness of alternative entry routes for mature students. These include Access courses, Level 0 programmes, no qualifications and work-based learning routes. The evidence presented here indicates that alternative entry routes offer some students opportunities in HE, but there are other barriers to access too. However, once in HE, these students may do as well as younger peers who have entered via more traditional routes.

Loots et al. (1998) researched the impact of a small-scale (24) work-based learning project aimed at giving semi-skilled and unskilled office and shop floor workers with no previous qualifications access to knowledge and skills required for entry to HE. They analysed course data and utilised student questionnaires and individual discussions. The evidence suggested that the courses were successful in recruiting a number of 'new learners', but the high rate of withdrawal indicates that the course did not (or could not) mitigate successfully against all the barriers to learning.

Connelly and Chakrabarti (1999) explored the uptake of places on Access courses in Scottish further education colleges by students from minority ethnic backgrounds. The research found that despite the institutional commitment to increasing the participation of students from ethnic minority backgrounds, there was little evidence of effectiveness.

Reddy (2004), researching a Year 0 programme offered by an HE/FE collaboration to promote access to HE for mature students, without prior NVQ Level 3 qualifications or their equivalent, also noted difficulties. The findings indicated high student satisfaction with the programme, but poor rates of actual progression and achievement. Again, this suggests that despite a positive student experience, there are other barriers to HE access that must be overcome. It also highlights the danger of being misled by the majority of work in this area, none of which is based on a trial or similar rigorous attempt at falsification, and most of which is small-scale and does not even use a comparison group when making claims of relative success.

Once in HE, the picture for mature students appears to be more positive. Haskins and Brown investigated the success of mature students entering Liverpool Hope University through four entry routes: Mature Entry – no formal qualifications, Access – access to HE courses, Standard – academic or vocational qualifications and Other – non-standard qualifications. The interviews indicated that the mature students had gained HE appropriate skills through their employment experiences. This is supported by the analysis of the withdrawal statistics, which showed that there is a similar pattern of withdrawal for all categories of student. Analysis of student results showed that there is a similar pattern of achievement for all categories (with the mature entry group outperforming the other in some instances).

Hayes and King (1997) undertook a study into approaches to learning among students completing Access courses at nine further education colleges to investigate whether the courses appropriately prepare students for undergraduate study. They used an 'Approaches to Studying Inventory' questionnaire with the students to assess

compatibility between their preparatory course and their HE learning. The findings suggest that Access courses might be inculcating attitudes, approaches and orientations to studying which are inconsistent with the majority of HE student experiences.

In Australia, Levy and Murray (2005) examined the success and progression of 'Diploma of Foundation Studies' students. The research indicates that when students are provided with an appropriately supportive transitional programme they achieve retention rates and academic performance comparable to the mainstream student body. Blicharski (2000) tracked the progress of summer school graduates into the University of Dundee using university records. Not only does this study show impressive rates of progression into HE, summer school graduates had a first year withdrawal rate of only 4% compared to 9% for the rest of the university population. McGillivray and Knox (2003) examined institutional data for 1,794 students at the University of Paisley, considering entry qualifications and degree classifications. Although fewer students with accreditation of prior learning (APL) as opposed to Highers or A-levels progressed to honours level, the primary reason for this is likely to be because the honours route is not offered on a part-time basis, rather than an inability to cope academically.

Research in the North East of England surveyed over 500 foundation degree students from 13 colleges and two universities (Dodgson and Whitham 2004). The findings suggest that foundation degree programmes are successful in attracting non-traditional learners: the majority were mature, first generation students, with alternative entry qualifications and studying part-time. Further research is needed to know the extent to which foundation degrees are attracting new learners who would have accessed other provision if the foundation degree programme had not been available.

In summary, alternative entry routes have variable success in reaching students and supporting them to completion and progression to HE.

4.5 Retention and success

4.5.1 The impact of pre-entry interventions on student retention and success

A number of studies suggest that pre-entry summer schools that develop skills for HE have a positive impact on students' retention and success in higher education in the first year and beyond. What is less clear from these studies is whether this is about the study skills acquired, or about increased confidence, social integration or other factors. The benefits of summer schools seem to be reaped by students of all ages and backgrounds.

Abrahamson and Jones (2004) assessed the impact of a three-day 'Flying Start' summer school for students entering the University of Central Lancashire with Advanced GNVQ qualifications (as opposed to more traditional A-levels). The study involved the student academic records for over 500 students per year for three years, comparing the retention rates and achievements of this student group compared to the rest of the student population. The analysis over a three-year period revealed that Flying Start students had a higher level of retention compared to the rest of the

student population (see also Jones and Abramson 2003). Research in Edinburgh found a positive difference related to participation in a pre-entry summer school (Sinclair and McClements, 2004). An analysis of adult students entering the University of Glasgow via the Scottish Wider Access Programme (SWAP) revealed that SWAP students who have attended the Pre-University Summer School are more likely to pass examinations than other students (Walker 1999). Of course, all of these findings may be due to a volunteer effect rather than the intervention itself.

4.5.2 Induction

Induction is potentially able to offer similar benefits to pre-entry summer schools – to support students to make the transition into HE. There is, however, very little research evidence about the benefits of such interventions.

Keenan (2005) at the University of Bournemouth introduced an induction programme that begins at pre-entry and extends into the first semester. This involves the provision of information, discipline specific work and information about student services. During this process there is a chance for reflection and identification of concerns and an opportunity to ask questions. This initiative was developed in response to interviews with first year students about their induction and transition. Feedback from participating students indicates that they value the opportunity to work through and assimilate the material on their own before they arrive. They suggest that it reduces anxiety and uncertainty. This is made possible because the information students need is provided to them in a managed and more controlled way, reducing the feeling of overload in induction week. The students prepare more effectively for HE, as during induction there is an emphasis on developing and building on the work they have already carried out prior to arriving at the university. Starting the induction process prior to entry also enables less time to be ‘wasted’ at the start of the year, which both students and academics appreciate. This study (as it is reported here) does not provide any information about the impact of the induction programme on first year retention and success.

Morgan and Lister (2004) have developed a nine strand approach to induction at the University of Sussex, aimed at improving the experience and retention rates of all students. The institution used national research and internal reviews to inform the development of the new process. The authors claim that initial data shows an improvement in retention rates, but there is very little data presented, and the study is not yet complete. Edward (2003) outlines a novel approach to undergraduate induction using a ‘challenge’ based activity programme which was developed to address high attrition rates in an engineering school of the Robert Gordon University. This has been evaluated using student and facilitator questionnaires. The induction programme achieved its aims of getting the students to know each other and their environment. However, though early attrition has been stemmed, attrition through the first year is largely unchanged.

4.5.3 Retention summer school

Sellers and van der Velden (2003) report on the retention summer school at the University of Kent, which has been established for students at risk of failure in their first year exams. The six-week summer school is offered in three parts – support prior

to the assessment, study skill development during the summer and further support during the transition into year 2. In 2001 40 students participated, and in 2002 90 students participated. The institutional data shows a retention rate of 97% among participating students in both 2001 and 2002 (sometimes involving a change of programme).

4.5.4 Student services

Institutions are moving towards integrated student support such as one stop shops (Layer et al. 2002). But there is little data available about the impact of student services either on the student experience, or student retention and success more specifically. There are difficulties in demonstrating a clear relationship between student services and retention (Thomas et al. 2002).

4.6 Loans, bursaries and credit constraints

During the last two decades the costs of higher education in England have, according to some breakdowns, gradually been shifting from the general taxpayers to the students and their families. Restrictions on access to unemployment and housing benefits were later accompanied by reduction and then abolition of grants and in 1998 the introduction of means-tested contributions towards fees. The latter will rise substantially in September 2006 when HEIs can charge fees of up to £3,000 per year for full-time undergraduates. The movement in England towards a system of income contingent student loans to ensure that HE remains free at the point of consumption followed reforms introduced in Australia, New Zealand and South Africa (Greenaway and Haynes 2004). Our analysis of the labour market rewards for graduation suggests that for the average student participation in HE remains a good investment. However, there have been concerns that this redistribution of the costs of HE will affect marginal entrants with a high aversion to debt and risk and relatively low expected post-graduation earnings. In particular, it has been conjectured that these changes will disproportionately affect potential students from low-income families and non-traditional students in general (Education and Employment Committee 2001). These funding changes have been considered in light of changes in student behaviour during higher education, the probability of dropping-out, or the growth of term-time employment (Metcalf 2005). In this section we are solely concerned with the impact upon participation.

Dearden et al. (2004a) provide an aggregate analysis of the impact of credit constraints on educational choices in the UK. They attempt to estimate both the share of individuals not staying on at the end of compulsory schooling and those qualified for entry but who are not attaining an HE qualification because of short-term credit constraints. They generate this estimate by comparing participation rates across the parental income distribution and after controlling for a number of observed measures of early family and environmental influences. Given data limitations, they view these estimates as an upper bound on the share of individuals really facing short-run credit constraints. Using the National Child Development Study (NCDS)58 and Birth Cohort Study (BCS) 70 cohorts (see Appendix A) they concluded that at the age of 16 there was a 7% gap in staying-on rates between individuals coming from families in the top income quartile and those from the bottom income quartile, for the 1970

cohort only. In terms of HE attainment, the gap was much lower, and may not represent a real difference. Dearden et al. conclude that if these patterns from 1986 still hold, then policy should target student decision-making at age 16. Indeed, early indications are that the Education Maintenance Allowance seems to be having a significant impact on increasing participation in post-compulsory education, particularly amongst males and those from the poorest socio-economic backgrounds (Dearden et al. 2005).

4.6.1 The impact of rising student debt on HE participation

There are a number of reports and surveys which indicate rising debt amongst recent UK graduates. Both the 2004 NatWest Money Matters Survey and 2004 Barclay's Annual Graduate Survey found that the average debt of recent graduates had risen to over £12,000. The 2005 Student Experience Report found that the amount of debt that students anticipate on graduation is significantly below the actual debt of current graduates. However, the expected levels of debt of disabled students and those from working-class backgrounds were 37% and 46% respectively higher than the average £10,000 debt. The same survey found that about 30% of current students were seriously worried about the debts incurred in university study. Metcalf (2005) notes the increase from 29% to 34% in the number of students expressing regrets about going to university since the introduction of tuition fees. She concluded that the effects of fee introduction had been to both increase expected student debt and to increase the degree of inequality of debt of those leaving higher education.

Once again such data refers only to those who have entered HEIs and therefore provides no direct evidence on the importance of financial constraints in deterring HE participation. However, a study of participation rates between 1994 and 2000 (HEFCE 2005) found no evidence that the introduction of tuition fees and the replacement of grants with loans had significantly affected entrant behaviour. Insight into the decision-making process of potential entrants is provided by a survey commissioned by Universities UK (Callender 2003) of nearly 2,000 UK school and FE college leavers working for HE entry qualifications. This was undertaken in 2002. The researchers concluded that, other things being equal, debt tolerant prospective students were one and a quarter times more likely to enter HE than debt averse students. Those who were most debt averse were those from the low income social classes, lone parents and Muslims (especially those of Pakistani origin) and black and minority ethnic groups. Amongst those still undecided about HE entry, perceived financial barriers were a major cause of their indecision and once again those from lower income social classes were more likely to mention concern about their ability to afford HE. However, the analysis does not take prior or expected qualification into account.

Metcalf's (2005) study of the initial impact of the introduction of fees concluded that the composition of students had not generally changed towards those that can and do absorb the higher debt. Metcalf found that the introduction of fees impacted most on disabled students and students whose families' did not provide financial support. These findings suggest that top-up fees are likely to have the greatest effect on participation amongst these groups, especially since the former group have relatively low expected post-graduation earnings. Whilst the Office for Fair Access requires that HEIs safeguard and promote fair access in the post top-up fees environment, students

unsupported by their families are not targeted in the Office for Fair Access' (OFFA's)' advice on access agreements.

There is some international evidence on the effects of a deferred fee system on widening participation. In Australia, where the income contingent charging system dates back to 1989, the proportion of young people from the lowest socio-economic backgrounds attending HE has remained largely unchanged, whilst overall participation rate has increased (Chapman and Ryan 2002). This suggests that an income contingent loan system may be fairly neutral in its impact upon widening participation. Findings from surveys of prospective Australian students (James 2002) and existing ones (Long and Hayden 2001) were generally similar to those reported above for the UK. Similarly, in Wales, Higher Education Statistics Agency (HESA) statistics show a steady long-term rise in the number of first degree undergraduates from 1995 to 2003, despite the introduction of up-front tuition fees in 1999, and the same is true of the increase in student numbers in Wales both before and after the re-introduction of grants in 2001 (Taylor and Gorard 2005).

4.6.2 The impact of bursaries

The Universities UK (Callender 2003) study concluded that the level of funds available to HE students through the student support system were, at the time of the survey, a barrier to widening participation. Lack of certainty about access to discretionary funding was found to act as a deterrent to participation. The complexity of student funding was found to impede entry and made the interpretation of information difficult, especially for older, low-income students with dependents. Forthcoming changes to fees and student funding are likely to further increase the overall complexity of the financial decisions facing HE entrants in England. Metcalf (2005) found that the system of hardship grants had not equalised finances across students. Students in receipt of hardship grants were expecting to incur significantly higher debt than the average (by about a sixth on average) on completion of their studies. However, West et al. (2003) found that the award of a bursary had a positive psychological impact by way of reducing students' fear of debt.

Manski (1989) has pointed out that the theoretical effect of financial aid on educational outcomes in general, and retention in particular, is ambiguous. By lowering the cost of education, retention is likely to be enhanced, but by encouraging participation amongst less academically prepared students, financial aid may lower retention. Previous research in the US has failed to reach a consensus on this issue (Kerkvliet and Nowell 2005) and as yet little research has been undertaken in the UK. In a pioneering, though small scale study, Hatt et al. (2005a, 2005b) found that students at two English HEIs who received bursaries were more likely to successfully complete their first year than non-bursary students from low income backgrounds, and that bursaries eased the transition into HE, favourably altered the students' perception of their university and, for some recipients, their commitment to succeed. However, Hatt et al.'s study was of two modern universities and Kerkvliet and Nowell, (2005) found that grants had encouraged retention in an undergraduate commuter university but not in a research-intensive residential university in the US. Hence the need to analyse the impact of bursary schemes in different types of higher educational institutions and different types of entrants.

Emmerson et al. issued 8,885 questionnaires by post to students who applied for and were eligible for an Opportunity Bursary in 2001-02 and 2002-03. Of these, 1,585 were returned, a response rate of 18%, making the results of little scientific interest. These students are compared with a matched sample of students eligible for Opportunity Bursaries, but who did not receive them. Hatt et al. (2005b) used institutional data on 6,201 students from two institutions in the south west of England to compare bursary and non-bursary students. In addition, 52 bursary students were interviewed. Some students were in receipt of Opportunity Bursaries, while some received institutional bursaries.

Both studies conclude that bursary support has a positive impact on retention. Emmerson et al. (2005) use linear regression to demonstrate a statistically significant increase of 2.6 percentage points between eligible students with and without bursaries for retention during the first year of higher education. On the other hand, propensity score matching finds an increase of 1.6 percentage points only, which is not significant. Anyway, 'significance' is meaningless here for a self-selected 18% response. Hatt et al. (2005b) found that bursary students were more likely to continue their HE studies beyond the year of entry than those from low-income backgrounds who did not access the award. These findings are supported by small-scale research undertaken by Glanville et al. (2005) with young, full-time students from economically disadvantaged backgrounds. These studies (Emmerson et al. 2005, Hatt et al. 2005a, 2005b) suggest that bursaries:

- Result in lower levels of debt.
- Ease transition into HE by upfront payments to buy books and equipment.
- Improve first year retention.
- Result in higher rates of threshold academic achievement in the first year compared to non-bursary students.
- Improve continuation beyond the first year of study – 93% compared with 88% overall.
- Enable students to borrow more money in subsequent years (due to lower levels of accumulated debt).
- Institutional bursaries engender greater institutional commitment.

A further key issue concerns whether bursaries are more effective if allocated on the basis of prior academic performance (merit-aid) or low family income (need-based aid). In the US since the early 1990s sixteen states have established broad-based merit-aid programmes providing scholarships to hundreds of thousands of students. These programmes typically waive tuition and fees at all public HEIs in a student's home state. Unlike the National Merit Scholarship scheme these state programmes typically only require recipient's to have a relatively modest previous academic performance. An analysis of merit-aid programmes in seven states by Dynarski (2003) indicated that they increased the attendance probability of college-age youths by 5-7 percentage points whilst shifting students towards four-year schools and away from two-year schools. In general, these programmes tended to have a stronger impact on the college attendance rates of black and Hispanic people. In contrast, research suggests that needs-based aid programmes in the US, such as the Pell Grant scheme, have more modest and sometimes insignificant effects on participation and have recently been displaced by merit-based programmes (Singell et al. 2005).

4.6.3 Conclusions

The series of natural experiments created by recent and imminent changes to the funding of English HE will provide a rich source of data for those researching the importance of financial factors as barriers to widening participation. However, at the present time our review indicates a relatively narrow evidence base for policy in this area. There is clear evidence of rising student debt on graduation, some suggestion that credit constraints on entry to HE are becoming more widespread, whilst fears of debt and financial constraints appear to be more prevalent amongst those groups with relatively low participation rates. Prospective students from these groups already appear to have problems in interpreting the information provided on bursaries and other financial assistance and the funding system from 2006 is likely to be much more complex. The current emphasis upon needs-based financial assistance in England contrasts with the US policy-makers' emphasis upon merit-aid: an emphasis which is evidence-based. We conclude by turning around our interpretation of Australian experience provided above. It seems likely that additional targeted financial assistance is required if an income contingent loan system is to co-exist with rising participation rates amongst under-represented groups. Evaluating whether the new system of funding in England provides that necessary targeted assistance efficiently should be an urgent priority for policymakers.

5. Learning and teaching in higher education

Summary

Student motivation to learn is related to personal values and aspirations, material rewards for completing the course, and perhaps the political significance of their collective action. Motivation appears to affect student retention and withdrawal, and therefore efforts to improve or maintain student motivation can lead to better retention and achievement amongst students. However, the evidence on this is in danger of being tautological.

There is little evidence that teaching approaches are being adapted for diverse learners, despite recognition in the literature that particular target groups, such as mature learners, have specific needs. There is, however, a tendency for non-traditional students to be perceived by teachers from a 'deficit' perspective, for which compensatory approaches have been offered. Some research questions the appropriateness of the higher education curriculum for an increasingly diverse student population. Some HEIs separate students from 'non-traditional' backgrounds to provide generic skills instruction to bring them up to the standard of others. There is no evidence whether this is the most appropriate thing to do.

There was little evidence of universities adapting their assessment methods to cater for the diverse educational backgrounds of students; rather the emphasis is on the students learning to adapt in higher education. Varying the forms of assessment seems to benefit all students, not just those from particular target groups. Disabled students can report difficulty with assessment methods. As their skills in assessment develop, all students become more comfortable with a wider range of methods.

5.1 The learner in higher education

5.1.1 Previous learning experiences

One factor identified by researchers to impact upon students' experiences of higher education is their previous learning experience (Bamber and Tett 2000). Students participating in the study by Castles (2004) portrayed a positive educational experience as one of twelve factors contributing to student persistence in higher education. A review of the literature by Donaldson and Graham (1999) revealed six key elements related to the experience of the adult undergraduate, in which 'prior experiences' was listed first. Drawing upon the personal biographies of adults, Donaldson and Graham recall various sources of learning from formal schooling to the social and cultural contexts of adult life. They argue that these prior experiences influence 'learners' motivations, self-esteem, self-confidence, responsibility and intent, as well as the psychosocial and value orientations...with which learners approach their education' (p.29). These ideas relate to the concept of 'learner identity' described in Section 3.

A study by Richardson (2003) offers evidence to suggest that younger students are also influenced by their previous learning experiences, at a practical level. In a

questionnaire to 750 incoming students, Richardson asked them to report on their level of preparedness for higher education. Their responses highlight some of the problems they encountered in the transition to university, including the difference from previous study, learning habits, motivation and complacency. Students referred to their lack of awareness about learning in higher education. They expressed surprise about issues such as the proportion of self-learning and levels of self-motivation required at university. See also Cantwell and Scevak (2004).

Research suggests that the transition of students with vocational qualifications or credit into HE can create particular challenges (see Section 4). Rhodes et al. (2002) studied the support that is available to and used by GNVQ students in seven FE colleges at the point of deciding whether to progress to HE or enter employment. A feature of the FE students' experience is the additional support that is available to develop understanding of course contents and key study skills. Staff noted that there are too few opportunities for independent learning activities, and that in HE there is a greater need to use published research and for students to analyse the material themselves. In the GNVQ programmes there is insufficient focus on essay writing, as reports are used instead, and tests rather than larger assignments are used, both of which do not adequately prepare students for assessment in HE.

5.1.2 Student motivation

This section addresses student motivation for study once they are in higher education (as opposed to motivation to enter higher education). In one study, students expressed a concern that due to the proportion of independent work and the lack of teacher monitoring in higher education, they found it difficult to motivate themselves (Richardson 2003). Similarly, Leder and Forgasz (2004) explored the learning obstacles faced by mature students enrolled in Australian universities and found that students' motivations to study surfaced as an issue.

Walker (1998) compared a group of students who withdrew from study with those who continued at university and found that the main differences lay in the attitudes and motivation of the students. She states that 'drop-out students were less motivated, less suited to academic work and had poorer attitudes' whilst on the other hand 'successful students were highly motivated towards study'. In a study by Bennett (2003) motivation featured as one determinant of 'drop-out' but was not identified as significant as either academic performance or the student's level of commitment to his/her programme. In Donaldson and Graham's (1999) model of college outcomes, the students' 'orientating framework' (i.e. motivations, self-confidence and value system), is modelled to have an effect upon their interactions with the classroom. Sellers and van der Velden (2003) found that a number of students struggled with motivation, time management and organisation. In a review of research about retention for the Learning and Skills Development Agency, Martinez (2001) identifies the theme of motivation within relevant research. He highlights a message from his previous work that efforts to improve or maintain student motivation can lead to better retention and achievement amongst students.

On the other hand, Murphy and Roopchand used the Intrinsic Motivation towards Learning Questionnaire and the Rosenberg Global Self-Esteem Questionnaire, with 160 students, and the findings were analysed for different groups of students. Mature

students were found to experience higher self-esteem and levels of intrinsic motivation compared to traditional students. Furthermore, mature women students were found to have the highest overall motivation and self-esteem scores. The authors speculate whether mature students may have developed a clearer perspective on the purpose of education, may be more familiar with their preferences, and/or may make more informed educational decisions.

Perhaps the apparent link between motivation (as assessed after students have dropped out) and retention is an illusion created by the research itself. Insofar as it is true it is a largely circular, and so useless, explanation. Those who drop out of HE tend to be less motivated to continue than those who stay on.

5.1.3 Student perceptions/expectations

There is evidence to suggest that higher education as experienced by students does not always match their expectations (Richardson 2003). Forrester and Parkinson (2005 – also reported in Forrester et al. 2004) found that there was a ‘gap’ between students’ expectations of induction and their perceptions of the induction to the programme they in fact received. As a result, appropriate adjustments were made to the programme to more fully meet the students’ needs. The study apparently demonstrates how taking account of student perceptions can lead to improvements in learning provision, although as usual it is small, local and without appropriate comparator groups.

Another intervention by Goldberg and Finkelstein (2002), randomly assigned a group of students to either a ‘team-taught learning community’ or ‘individually taught unlinked classes’ to test their hypothesis that those assigned to the learning community would have significantly better academic and social integration and more positive perceptions of their experiences. They also believed that those students would gain higher course grades and grade point averages, have more contact with classmates and instructors, and greater commitments to college and second semester persistence. The research indicated that the team-taught learning community did make a difference to students’ perceptions of academic and social integration.

The link between perception and experience is backed by Prosser and Trigwell (1999), who assert that students’ perception of the learning and teaching situation is central to the quality of their learning. Furthermore, perceptions can affect students’ subsequent engagement with the learning environment, as Kasworm (2003) contends ‘patterns of learning engagement are, in part, reflective of adults epistemological beliefs’ (p.96). Her work explored the construction of the adult student learning world and the perceptions of knowledge held by those students. She found that adults held assumptions about the nature of academic (vis-à-vis ‘real-world’) knowledge and the behaviours required to be successful in their studies. Kasworm classifies such initial perceptions to be the students’ ‘entry voice’ and, like Johnston and Merrill (2004), demonstrates how learners’ constructions change over time as they become more involved in HE.

A study by Laing and Robinson (2003) links student perceptions with the issue of retention. Their study investigates the proposition that a student’s perceptions and expectations of the teaching and learning environment may impact on their decision to

withdraw. They argue that a 'failure to take into account the personal meaning the teaching and learning environment has for the individual student represents a missed opportunity to develop a more analytical framework of student withdrawal' (p.179).

5.1.4 Approaches to learning

It is striking that amongst the 174 pieces of literature pertaining to learning in higher education, there are few studies considering the approach that students take to learning in higher education (Haggis 2003, 2004, Bamber et al. 1997). Amongst those that do (Osborne et al. 2002), there are significant differences in the authors' approach to the topic. These include investigating online learning approaches (Clarke 2002), induction programmes (Forrester and Parkinson 2005), student experiences (Richardson 2003, Bamber and Tett 2001), adult versus undergraduate teaching and learning approaches (Malcolm and Zukas 2000), innovative approaches to learning and development in the workplace and its wider context (Pinnick et al. 2003) and engaging in university learning for students with prior industrial experience.

Cantwell and Scevak (2004) investigated the academic experiences of male students from an industrial background during the course of a two-year degree programme. Participants were required to complete three questionnaires relating to aspects of learning – Schommer's Epistemological Beliefs Questionnaire as a measure of student understanding about the nature of knowledge, Biggs' Study Process Questionnaire as a measure of the underlying conception of learning driving engagement, and lastly, Cantwell and Moore's Strategic Flexibility questionnaire to determine how students metacognitively deal with issues of complexity in learning. It was found that students with an industrial background scored higher for a deep approach than a surface approach to learning (relative to their peers) and appeared to maintain this over the duration of their study. The students demonstrated an understanding of the role of effort and strategic learning in acquiring knowledge and a tendency towards practical rather than propositional knowledge. These dispositions were found to be enduring over time, suggesting 'that students did not fundamentally question or restructure their driving belief systems' (p.143).

5.2 Teaching in HE

5.2.1 Institutional strategy

A study by Layer et al. (2002) was based on an analysis of the 1999 initial widening participation strategic statements and of 2001 widening participation strategies submitted by higher education institutions. It found that less than a third of HEIs have explicit links between learning and teaching and widening participation strategies. Those writing about students with disabilities express particular concerns about the need to embed policy and provision for disabled students within all institutional procedures – a move which they argue would be of benefit to all students (Riddell et al. 2004). Whilst progress has been made in most institutions with regard to admissions, examinations, assessment and student support, teaching and learning remains an area requiring significant change. The research identified inherent contradictions. Hence whilst universities were committed to identifying the needs of

disabled students, this was not matched by a willingness to adapt their teaching and assessment practice.

There appears to be conflicting opinion as to the need to single out disabled students within policy. Avramidis and Skidmore (2004) argue that doing so is counterproductive to a move towards inclusion. Powney (2002) notes the tension between an inclusive approach to teaching and learning and recent changes in higher education such as increasing the student:staff ratio or reducing time spent with students. Hall and Healey (2004) argue that devising general policies to support teaching, learning and assessment of disabled students may not always meet the specific needs of individuals. It is notable that similar arguments have been raised outside of the disability context. In a paper by Wilson (1997), the issue was raised with regard to mature learners. Therein, she broaches the need to understand the experiences of being a mature student before considering how policy and teaching practice for these students can be developed. This target group were found to face unique problems, differences which she argues may lead institutions to generate policy and action specifically for them. At the heart of this argument is the homogeneity/heterogeneity of particular groups of students. As Hall and Healey argue, there is no one solution to fit all. Learner difference may be better conceived as a continuum. Wilson draws similar conclusions in stating 'there is no unified argument to say that mature students are different. Nor is there one which says they are similar' (p. 364). Notably, each of these authors maintain that teaching practices to support particular students often benefit all students, as such measures often simply represent good quality teaching and learning practice anyway.

5.2.2 Student experiences of teaching methods

Barriers encountered on entry

There is evidence that students need to adjust to the teaching practices of higher education. Both Merrill (2001) and Richardson (2003) talk of students having mismatched expectations of the teaching and learning methods they will find in higher education. Despite taking different target groups – mature students and students entering from school respectively – both studies found student expectations were based on the students' experience of the (often formal and didactic) teaching methods at school. Richardson talks of finding a sense of resentment amongst the 750 students that the methods they had been taught previously were no longer appropriate. Merrill's (2001) study found that on discovery that higher education was different from school, students had to learn (to a greater or lesser extent) how to become independent learners. Moreover, she argues that adjusting to learning through lectures and seminars is part of the socialisation process of learning the student role (p. 9). A recurring theme amongst students was that they were happy to adapt to the culture and methods used in higher education but alongside they wanted to be recognised and respected as people with something to offer (Johnston and Merrill 2004).

The level of information provided in advance of a course was found to be a barrier for students. In a questionnaire study about the experience and perceptions of 94 first year undergraduates on a language programme (Chance 2004), the adjustment to higher education was found to be particularly problematic for students who had not received the right level of preparation before university. Similarly, some of the 608 students

who responded to a questionnaire in Musselbrook's (2003) study accused the university of not providing enough information.

Barriers in different teaching contexts

When rating satisfaction, 67% of 397 students in McAuley's 2004 study were more satisfied with situations that offered face-to-face contact with lecturers. This preference was also expressed by the majority of students (of unknown number) in Johnston and Merrill's study (2004). The authors noted a recurring theme that mature students preferred to be recognised and respected as people with something to offer the ongoing debate and, for this reason, seminars were the preferred method of teaching and learning. Similarly, those who preferred seminars to lectures in Merrill's (2001) study did so because they were interactive.

It is notable that studies focusing on the barriers experienced by students in different teaching contexts are particularly targeted at students with disabilities. The predominant teaching context found to be most problematic for those with disabilities was lectures. In the study by Hall and Healey (2004), 46% of 80 disabled students from six universities indicated that they had faced barriers to learning in lectures. Examples of barriers include the number of slides presented, the lack of a break, the speed of delivery, the difficulties of listening/watching and note taking. Similar findings were reported in a survey of 173 students (Fuller et al. 2004), where 44% of students reported having experienced barriers during lectures associated with their disability. Examples included the lecturer talking too quickly, removing the OHT too fast, and note taking.

Additional barriers were present in other teaching contexts for disabled students including during fieldwork (e.g. due to the requirement to make notes in the field) and independent work (i.e. researching for an assignment or dissertation), where 40% of 80 students reported problems (Hall and Healey 2004). In the study by Fuller et al. (2004), 12% of 173 students reported experiencing barriers in similar off-campus contexts (such as fieldwork and school placements).

Of course, it is important to recall that most of these studies made no attempt to contrast these findings with those from other students (i.e. those without disabilities) who may also find speed of delivery, lecturers removing slides too quickly, and so on, to be important barriers to learning.

Barriers in teaching approach

Barriers were also reported by students across a number of studies, which were not necessarily related to the teaching context. Chance (2004) reports that the speed of delivery and lack of support was problematic for some students, when being taught in their target language. In both studies with disabled students (Hall and Healey 2004, Fuller et al. 2004), barriers were also experienced in the use of technical facilities and learning resources (e.g. lecture handouts and computer assisted learning packages), such as the font being too small, the colour of the page, or notes not being comprehensive enough. Lack of cooperation from lecturers in accommodating their needs, such as not allowing their lecture to be tape recorded or unrealistic expectations of amount of reading required, created further barriers for disabled students.

A further barrier was suggested by Dibben (2004). Her small scale study raised the issue of whether the content of the teaching material was attracting students from lower socio-economic backgrounds on an undergraduate music degree at Sheffield University.

5.2.3 Teaching modes

The effect of delivery method on student learning outcomes is a topic for investigation explored in two papers, albeit approaching the issue from two angles. Richardson and Woodley's (2003) study examining the predictors of attainment in students awarded first degrees in UK HEIs, found that there were variations in the proportion of good degrees awarded in different subjects. They argue that such variations can be plausibly attributed to differences in teaching and assessment practice in different academic disciplines. But there is no real evidence for this supposition, and there are a range of other plausible explanations for variations in results (Smith and Gorard 2006).

Beacham and Alty's (2004) study investigated the effect of digital media, as a delivery method, on the learning outcomes of students with dyslexia. It was found that presenting e-learning materials to dyslexic students using different combinations of media leads to significant differences in their understanding. The authors suggest the need for further research to substantiate the findings. Further work by the same authors has investigated the effectiveness of delivering visual information using digital audio broadcasting (DAB) as part of a classroom exercise or different computer media combinations for communicating information. The findings offer cause to examine the way information is presented:

'...the intrinsic nature of media ... [e.g. auditory or visual] ... does have an effect on the way students interact with the material and hence will affect what they learn or how they learn it' (p.20).

Several other authors have attempted to assess the impact or critique the use of new technologies in higher education. Heaton-Shrestha et al. (2004) report on one such study, to investigate the effectiveness of new technologies to improve participation by students from non-traditional backgrounds. The investigation focuses on the use of a virtual learning environment (VLE, namely 'Blackboard') at Kingston University, since it became a key element of the teaching and learning strategy at the university. 'Blackboard' is a commercially available virtual learning environment and is a trademarked product. There were two key strands to the research – access and success. The access element of the research sought to elucidate how a VLE-based mentor scheme can help change perceptions of higher education (as well as help in the application of) students from underrepresented backgrounds. The success strand sought to evaluate the effectiveness of ICT in improving on-course support for a more diverse range of entrants. The research uses survey data, evidence from discussion boards, case studies and focus groups and interviews with both students and staff. With regard to the use of the VLE, it was found that there were variations across the university, with the use being contingent upon individual competencies, experience and attitude towards the role of technology in education. Furthermore, the students' use of the tool reflected the staff patterns of use, with 50% of students reporting never having used it.

Staff expressed a number of concerns including that the VLE replaces face-to-face contact with students. It may discourage lecture attendance, and have an adverse effect on the teachers' ability to gauge the students' learning needs and level of engagement. Staff were also concerned that 'Blackboard' affected students' conceptions of learning – leading to a 'consumerist' view further discouraging student attendance. Students, however, reported positive comments including improved communications with lecturers. 'Blackboard' represented an alternative method of delivery for students and one in which they could manage and shape their own learning.

In Clarke (2002) questions are raised about what is required to realise the potential of online approaches. Issues such as skills required, differential access to ICT, and the location of the learner can all reinforce barriers to learning for those from non-traditional backgrounds. Clegg et al. (2003) warn that technologies are not neutral. Rather they engender assumptions, social processes and pedagogical discussions that focus on the terms and shape of the media adopted. A further critique is offered by Hull (2003), in offering evidence of a 'digital divide' when it comes to students' access to and ownership of computer technology (see also Selwyn et al. 2005). One intervention seeking to address this issue is the Llynfi Valley project (Payne et al. 2005), which has included the provision of ICT courses for students from a low participation neighbourhood. The success of this training appears to have been measured in that it attracted 202 new students during the first term of operation, and 340 by the February of the following year.

In the literature there are several examples of courses being delivered either entirely or mostly online, such as Richardson (2004), Noble et al. (2003), Lim (2004), Bennet and Marsh (2003), and Dhillon (2004). Apostoli (2005) highlights the barriers to participation experienced by dyslexic students in the accessibility of teaching materials. The paper describes how the Open College of the Arts has overhauled its teaching materials to overcome such barriers (e.g. providing different fonts, different coloured backgrounds, use of hotlinks, and the removal of cross referencing). Apostoli warns that the vast amount of information any educational institution would need to access/process for distance learning is an important factor to consider. Noble (2004) developed guidelines from a pilot study, to assist universities when designing online learning:

- Develop one-stop registration and enrolment procedures.
- Co-ordinate the number of modules/courses on offer.
- Flexible completion regulations.
- Quarterly award boards.
- Need for clear guidance to students at each step of the process.

It is notable that despite talking to participating students, there is no mention of the potential barriers to participation in the recommendations. The evidence provided suggests that caution needs to be applied to an interpretation of research findings in such evaluations of e-learning courses. Whilst studies may often question the experiences of students who undertake them, there is little recognition given to the numbers or views of those who do not participate due to the methods being employed.

A link between e-learning and retention has been explored in a study by Packham et al. (2004). The study examines the causes of student withdrawals experienced in the E-College Wales BA Enterprise programme. Through interviews with former students, eight prime causes of withdrawal were identified. These were categorised into intrinsic factors (i.e. internal course related barriers) and extrinsic factors (i.e. barriers to e-learning external to the university such as employment issues and personal problems). Notably, it was the intrinsic factors that were perceived to be under the influence of the course team.

5.2.4 Approaches to diversity

A third sub-theme considered within literature on teaching approaches concerns their suitability for the increasingly diverse student population in higher education. Within the literature, there are concerns expressed not just about the effect of teaching a more diverse student population but also about the effect of increased student numbers in higher education. Farr-Wharton (1997) argues, albeit from an international perspective, that the resultant effect of changes in student diversity is an alteration of the teaching and learning needs of students. Furthermore, there is a corresponding need to maintain the quality of the higher education product. Malcolm and Zukas (2000) argue that:

‘The opportunity presented by “massification” to promote inclusionary pedagogic practice in higher education has been overshadowed by the pressure to a) teach vastly increased numbers of students on less money and b) produce the right kind of evidence of effective teaching’ (p.1).

In focusing on the ways in which teaching staff and institutions can support non-traditional students in learning, Bamber and Tett (2001) promote the use of integrative learning experiences. These call for teaching methods that use and appreciate different forms of knowledge, make connections across disciplinary boundaries, and positively value personal and social differences within a group. Haggis (2004) makes a further recommendation to teachers in her paper, encouraging a wider range of approaches to thinking about learning in higher education. Haggis suggests that lecturers should investigate assumptions embedded in the discursive and curricular practices of their higher education teaching. Having examined individuals’ learning narratives, and having argued that students are different both from each other and from academics, she concludes there are issues in assuming, for example that:

- Students will know how to think, read and write in response to a reading list or set of essay questions.
- University teaching is about exploring and conveying key features of disciplinary content, rather than examining and modelling processes of thought and ways of interacting (p.349).

The study by Curry et al. (2003) investigates the academic literacy experiences of 26 students on two of the Open University’s Access programmes (‘Openings’). Academic literacy – the specialised forms of reading and writing that occur at university – is taught to help retain non-traditional students in higher education by increasing their comfort with academic discourse and teaching. There are four disciplinary or interdisciplinary skill based courses, which are delivered entirely by

telephone with tutorials lasting between 20 and 40 minutes. The course is reported to attract students who have difficulty travelling. The telephone as a tool for teaching was seen as beneficial by tutors in providing one-to-one support and putting students under more pressure to be active learners. This study appears to assume that intervening in such a way will support the retention of students, but the response of students is not reported. Preece and Godfrey (2004) call for universities to examine the academic literacy experiences and expertise of new entrants to higher education, and adopt an explicit and dynamic approach to teaching of academic literacy in order to enable students from a diverse range of backgrounds and widening participation initiatives to succeed.

5.2.5 Teacher attitudes and perceptions

Teacher attitudes and perceptions can create barriers to effective widening participation, especially in relation to specific groups of students. The barriers appear to stem from staff assumptions about students in general or about specific student groups. When Clegg et al. (2003) investigated motivational problems among first year undergraduate students, through interviews with teaching staff, the issue was posed as a 'student problem'. Moreover, motivation was also presented as an 'Asian problem', as their discussions of motivation were 'overlaid by a racialising discourse', in which Asian undergraduate students were blamed for having poor motivation. Staff in Taylor and Bedford's (2004) study focused on student-based factors as the reason for withdrawal rather than identify teaching practice and curriculum design as factors. Following a study of the experiences of 32 mature, 'non-traditional' students as they make the transition to higher education, Bowl (2001) questions the tendency to consider students from non-traditional backgrounds a problem, rather than the educational institutions responsible for their progress. Another group of students commonly perceived from a 'deficit' perspective includes those with disabilities. For example, the study already discussed by Fuller et al. (2004) identified staff attitudes to be an issue in whether the students' needs were accommodated by the institution.

The attitude of the teacher/lecturer has also featured in studies targeted at mature students. Wilson (1997) investigated the 'lived experience' of being a mature student in a Scottish university, through in-depth interviews with 10 students and a questionnaire (70 with respondents). Lecturers were reported to accommodate the needs of mature learners (e.g. by changing the times of courses), although doing so did not satisfy the needs of all students interviewed. Mature students raised issues of lecturer power and dominance associated with their age, such as not liking or being used to 'challenges by students with experience of life', or perceiving mature students as a threat, or feeling intimidated by lecturers. In Merrill's (2001) study, on the other hand, lecturers' perspectives towards teaching mature students were sought, as part of a wider study examining the learning and teaching experiences of adult students and lecturers. The study revealed diversity across departments, with some (such as sociology and law) being more favourable and supportive towards teaching adults than others (such as biological sciences). Lecturers raised mostly positive comments when asked whether they enjoyed teaching adults. However, when asked whether they had modified their teaching style as a result of having adults, most lecturers had not (despite a tendency to use traditional and didactic methods). 'The teaching approaches and institutional structures remain geared towards younger students' (p.17).

In a paper by Haggis (2004), it is argued that theoretical accounts of learning in higher education focus on the psychological (i.e. individualised learning). Malcolm and Zukas (2000) argue that attending to individualised learning limits their focus to transactions in the classroom rather than embracing the broader social or cultural context of learning. Notably, Bamber et al. (1997) partially attribute the success experienced by a group of 'working-class' adult students in higher education to their collective resistance to the individualising tendencies of traditional approaches to higher education.

5.2.6 Relationships between the learner and lecturer/institution

In some studies, the relationship between the lecturer and student emerged as a barrier in higher education. This was evident in a study by Curtis (2001), examining the perceptions of academic staff towards full-time undergraduates taking paid employment during term-time. Not only did the extent and nature of undergraduate term-time work appear to be largely unknown to academics, there were also divided opinions about the value of working whilst studying. The evidence is drawn from 20 in-depth interviews with academic and non-academic staff. A study by Kember et al. (2000) investigated a 'sense of belonging' amongst part-time students in Hong Kong. Following interviews with 53 students, relationships with teaching staff emerged as one of seven factors for promoting a sense of belonging and improved learning outcomes. The authors contend that relationships can be developed through encouraging interaction, providing good quality teaching and making a positive initial impression. A further example is provided from a doctoral study (Askham 2004) researching the barriers to learning experienced by adult learners. As part of the study Askham explores the different roles of the tutor and concludes that the student and tutor are linked symbiotically in a mutual learning experience whose essential foundation is trust. McAuley's (2004) study provides evidence of the value that students place on 1:1 contact with lecturers and tutors. There was a marked contrast between lectures and seminars when respondents are asked to rate their satisfaction with face-to-face contact with lecturers and tutors. Furthermore, the satisfaction with tutors was twice the rating for lecturers (65% of 397 students rated satisfied/very satisfied versus 30% for lecturers).

The work by Bamber and Tett (2000, 2001) actively addresses the interaction between personal and institutional factors, in their study of the experiences of students from 'working-class' backgrounds. Students were supported to remain working in their own communities whilst studying part-time through the Lothian Apprenticeship Scheme Trust (LAST). The scheme was said to emphasise 'the continuing role of participants in their communities rather than the possession of academic qualifications' (Bamber et al. 1997, p.27). In their 2001 paper, Bamber and Tett promote student integration, characterised by students feeling valued for who they are as people and for their prior experience, and argue that there is a need for the student's relationship with their tutor to be supportive.

In recognition of the importance of inter-relationships, Laing and Robinson (2003) have based their explanatory model of student withdrawal on the interaction between student and staff/institutions. Their model focuses on the explanatory properties of a student's decision to leave rather than on descriptive properties. The model attempts

to explain the relationship between the dynamics of the teaching and learning environment and how this environment interacts with the expectations and perceptions of the student. It emphasises the importance of the institutions response to students' beliefs and addresses how those processes interact. The authors hope that by attending to the underlying nature of the teaching and learning environment and the interactions therein, student retention may be improved. Of course, as with all of the studies outlined here, they may well overemphasise the role of relationships simply by selecting them as a focus variable to study, rather than using a more scientific and multivariate design.

5.3 Curriculum design and development

5.3.1 Social inclusion

Some studies seek to determine whether the extent to which the curriculum aligns with the needs of a particular group of students (Dogra 2004). Dibben (2004) suggests the reasons why a music course at Sheffield University failed to attract students from lower socio-economic groups. From a survey of 41 students and from interviews with seven current students and three who had withdrawn, it was found that the curriculum was considered too 'traditional' by those who identified less with classical music. Musical performance activities were found to be central to the degree of integration and engagement experienced by students, and furthermore there was an association between socio-economic class, term-time employment and academic achievement. Thus the author raises the issue of socio-economic inequalities in music participation, linked to curriculum. What weight should be attached to these findings is debatable.

Other institutions have recognised that the curriculum is not aligned with the needs of particular groups of students to attract and retain them. For example, DiGregorio et al. (2000) argue of the importance of refining and developing the curriculum to promote the academic success of Aboriginal and Torres Strait Islander students in Australia. A working example of curriculum alignment is described in a paper by Saunders et al. (2004). They introduced astronomy and science fiction to the curriculum which helped to recruit students from disadvantaged backgrounds and succeeded in attracting both adult learners and school leavers. Apostoli (2005) developed a creative curriculum that is flexible and engaging for new learners. E-learning enables accessibility, the personalising of teaching materials, provision of materials in different fonts and backgrounds and the use of XML technology. An intervention designing a curriculum for a particular target group is the African-Caribbean and Asian curriculum project (Houghton 2002). Courses have been set up incorporating a culturally relevant curriculum, specifically for minority ethnic communities in East Lancashire and Preston. They have actively sought to employ role models and tutors/co-ordinators who are community based. This project also offers flexible delivery in the community. Pickerden (2002) is another example of a project targeted at the provision for ethnic minority students in community settings. The project sought to counteract criticisms levied at higher education about the rigidity of programmes on offer – programmes that are pre-written on the assumptions that learner groups have the same needs and abilities. The project tried to test a new dynamic model of curriculum delivery – one to reflect the learning needs of individual communities and adapt as learners identify their changing educational

needs. Two community sites are now used for the delivery of a higher education course selected by the community organisation, facilitated by a website to link students on the main site, a summer school and regular visits from a widening participation co-ordinator. Some students have progressed from part-time to full-time study, facilitated by flexible entry points and building of confidence.

The realisation that curricular programmes can be further strengthened and improved for students from different backgrounds is at the heart of a study by Siu (2005), who used observations and interviews with students to build a change programme. Accordingly, he has made three key amendments to a product design and engineering course for part-time students in Hong Kong:

1. Student-centred subject contents and learning activities – based on three levels of work – a) understanding the background of students, b) respecting what they need, and c) focusing on what they need, which requires continuous evaluation and revision.
2. Flexible timetable arrangements and learning environment – students can negotiate changes to their timetable and initiate decisions on the variety and nature of their learning activities.
3. Open channels of communication between students, curriculum co-ordinators and teaching staff – provide opportunities for regular and informal communication, build mutual respect, and make speedy and explicit responses to requests.

It may not be enough to ‘re-package’ the current curriculum to make higher education more attractive to socially excluded groups. There is also a need for universities to take account of the cultural, social, economic and political realities of marginalised people (Jones and Kop 2004). Andreshak-Behrman (2003) found that whilst ‘academic schools and services were willing to try and provide for students’ requests to effectively involve all students in university life, the institution may need to be proactive and make visible a greater commitment to the value of different forms of diversity instead of just the cost’ (p.138).

The valuing of different forms of diversity is also echoed in a study by Hall and Healey (2004). They conducted a survey of the experiences of disabled students in one subject discipline across a range of higher education institutions as part of an inclusive curriculum project. Following this study, they argue that ‘in developing an inclusive curriculum, which is accessible to all students regardless of background or capabilities, it is sometimes easy to forget that individual needs vary’ (p. 24). As they found, some disabled students face additional barriers. Andreshak-Behrman suggests that a more inclusive environment could be created by focusing on what students bring and contribute to the university and how they might affect social change. Hall and Healey, on the other hand, advocate holding individual discussion with students rather than devise general policies to support teaching, learning and assessment, with the assumption that ‘one solution fits all’.

In the Community University of the Valleys project in south west Wales, Jones and Kop (2004) have sought to involve students in discussion about the formation of the curriculum. Their report emphasises the importance of listening to and learning from students, on the premise that:

‘...unless local people are actively invited to participate in development of inclusive curriculum, there will be further marginalisation and a narrowing of participation in learning’ (p.169).

The authors describe how, in one community centre, initially a customised curriculum was developed, including taster and introduction courses and learner information days, and later a community-based degree was set up, to address learner and community centre demands. Actively facilitating negotiations with learners and communities and introducing the new perspectives of diverse groups of learners, the authors argue, will prompt stronger and longer lasting change than that driven by current policy to widen access to higher education. George et al. (2004) also seek to use the knowledge and experience that students bring to the course in the design of the curriculum of an Access course.

Whilst thus far the articles talk of the potential of the curriculum to acknowledge individual differences and differences that exist between groups of people, Ackland (2005) focuses on its potential to account for differences within individuals’ lives. In exploring the autobiographical accounts of students’ experiences of learning since leaving compulsory education, the multiple identity of learners emerged. Students used their experience of learning in diverse situations and from multiple roles, that arguably are a source of personal growth and professional development. Ackland argues that the institutional response to increasing access, such as by extending the range of courses on offer to provide more specific content, is of limited value. Rather the curriculum should concentrate on developing the learning identities of learners, and be underpinned by processes that encourage connectivity and reflection. It is notable that other studies to highlight the role of reflection do so in terms of seeking evidence of effective work related learning (Goodwin and Forsyth 2005). Westland (2004) also explores the learning journeys of adults and argues that the multi-disciplinary curriculum enabled students to relate learning to their own cultures.

5.3.2 Teacher and learner perspectives

Those who report on the practice of the development of community degree programmes (Pickerden 2002, Jones and Kop 2004, Siu 2005) talk of the challenges and barriers that have been overcome along the way, requiring the commitment and enthusiasm of project staff. Parker et al. (2005) describe the enthusiasm of widening participation staff for the provision made available. Consequently, there is a need for universities and staff to see that a particular issue is within their control to influence in order to bring about change.

However, in a study by Taylor and Bedford (2004) staff were uncertain about the influence of course design factors on non-completion. As a result, they regarded that ‘initiatives to address non-completion should focus on helping students to change, rather than changing course design, teaching or institutional practices’ (p.390). But in studies seeking the opinion of the students, the curriculum emerges as an important factor, e.g. Westland (2004) and Musselbrook (2003). DiGregorio et al. (2000) found that minor challenges experienced by the students, if left unresolved, can interfere with their studies. A study outside of the higher education context (Davies 1999) found that curriculum delivery was one of the factors that had a pronounced impact on retention rates, despite a commonly held belief that student hardship is the primary

cause of student drop-out. Focusing on perceived student difficulties, through a 'compensation' approach that assumes the student to have a 'deficit', can fail to recognise the factors that are of importance to students.

5.3.3 Building work experience into the curriculum

There is little research evidence about the contribution of work experience to the higher education curriculum (Blackwell et al. 2001), but the limited evidence is that work experience is related to a positive learning experience and higher employment rates. The premise of work by Foskett (2003) is that the curriculum in higher education should be influenced by employer needs. He reports on the planning of three foundation degree programmes developed by a consortium of employer groups from both public and private sectors, further education colleges and one university. See also Davies et al. (2005).

5.4 Assessment and feedback

5.4.1 Entry qualifications and assessment experience

In a study comparing students entering higher education with academic and vocational qualifications, Hatt and Baxter (2003) found that a vocational background helped students develop a set of skills that did not prepare them for the assessment regime they encountered on an academic course of study. Their assessment results were found to be lower until they learned the 'rules of the game'. Other studies focusing on prior educational qualifications, including Hoskins and Newstead (1997) and Rahidzab et al. (1999), address the link between qualifications and performance. These studies consider variable entry qualifications, and question whether they are a useful indicator of performance. They found that the type of qualification students entered with was only a weak predictor of subsequent performance. They argue that the results offer clarification that opening access to students with non-traditional qualifications has not led to any diminution of standards. See also Smith and Gorard (2006) who demonstrate the futility of attempting the equivalent of a school-effectiveness study in the HE sector where the outcome measures are not standardised or moderated. This lack of standardisation means that degree results, for example, are almost inversely related to intake qualifications (such as A-level grades).

At the University of Paisley (Knox and McGillivray 2005), four credit-rated modules have been created to equip students for coping with assessment regimes and university delivery. These modules are delivered prior to entry into higher education and successful completion of any one of the modules guarantees progression to undergraduate study. There is no rigorous evaluation of the benefits.

5.4.2 Forms of assessment

Varying assessment practice emerged in Richardson and Woodley's (2003) study of indicators of performance. They used HESA data to investigate the role of variables (such as age, gender, subject studied and mode of study) as predictors of attainment for students awarded degrees by higher education institutions in the UK. Whilst they found variations in academic attainment between different groups of students, this is

partly determined by the different teaching and assessment practices encountered in different academic disciplines (but see above). Case study research by Powney (2002), looking into widening participation learning and teaching practices, draws attention to the efforts made by different universities to employ alternative means of assessment for students with disabilities, thus enabling them to fully demonstrate their skills and knowledge. Powney states:

‘...what emerges clearly from the case studies is how adjusting methods of learning, teaching and assessment to meet the needs of a very wide range of students – including mature students and disabled students – in practice benefits all students’ (p.5).

Other authors considering different methods of assessment focus less on a particular group of students and more on the methods being employed. Povey and Angier (2004) focus on the nature of assessment used in a mathematics course in higher education. They accentuate the difference between summative (assessment of learning) and formative assessment (assessment for learning) and add a further category, that of assessment as learning (assessment as education). The authors describe the use of educative assessment practices that seek to provide students with:

- Space to explore, try out different approaches and develop their own ideas.
- An opportunity to become aware of their own progress and find out about themselves as learners.
- An opportunity to negotiate with tutors and/or peers on matters of assessment including the allocation of marks.

The practices were chosen to enable students to engage with ‘doing mathematics rather than meeting the results of the mathematical activity of others’. Povey and Angier focus their research on students whose weak mathematics entry profile was followed by success in the subject. Students were interviewed about possible intrinsic and extrinsic reasons for the change. A key emergent issue was the students’ experience of assessment. The differences in assessment practice relative to their previous experience appeared to contribute to students’ retention and success on the course. Similarly George et al. (2004) found that the nature of assessment used was significant to students’ experience and engagement with the course. The authors report that the incorporation of both summative and formative assessment into an Access programme was crucial for students in creating confidence, a positive attitude to education and successful engagement with cognitive demands.

In describing the approach of the Open University (OU) for students with low educational qualifications on an Openings course, Peasgood (2004) acknowledges the role of assessment in (de)motivating students. To overcome this issue, the OU uses innovative approaches to assessment for these students, focusing on increased dialogue, understanding and reflection. The measures include communicating the purpose of assignments to students, i.e.:

- To help students make sense of what they have learnt.
- To try what they have learned.
- To practice in presenting work.
- To obtain feedback from the tutor.

- To practise planning and organising their work.
- To provide evidence of their work (p.365).

Other strategies include giving students three formative assignments followed by a summative assignment to enable them to practise their skills before attempting the assessment for credit, encouraging students to reflect on their own work, integrating assignment feedback into student–tutor dialogue, using transparent criterion-referenced assessment, allowing students to negotiate deadlines, using flexible communication between tutors and students, and an emphasis on the process rather than the outcome. The students report on their growing confidence, changes in their approach to their studies and improved organisational skills, whilst the assignments evidence improved written communication and more successful attempts to engage with academic work. Murphy and Roopchand (2003) reiterate the crucial role of feedback for students. They believe that feedback has an important role to play for individuals in continuing to engage in challenging tasks.

Noble et al. (2003) provide another example of a study reporting on the introduction of new approaches to assessment to fit the needs of a particular group of students. Their paper evaluates a pilot project at the University of Teesside to offer higher education accredited short courses using online learning materials offered through learndirect. New practices include an assessment technique workshop to communicate expectations to students, electronic submission of assignments, an online handbook outlining assessment guidelines, structured online discussions with a tutor, tutor advice and guidance during the preparation of assignments, email access to tutor, and explanation of the process of reflection for assessment purposes. The authors argue that piloting online learning in a flexible and responsive way has enabled the university to access new groups of learners.

The research reported here demonstrates the value of an integrated approach to assessment, which is less focused on the outcome and more on making assessment integral to the learning process. Another common factor was to encourage students to reflect on their own learning. George et al. (2004) go as far as to argue that self-assessment is a vehicle for mainstreaming students from disadvantaged backgrounds. In several of the studies, the authors provide evidence that changes to assessment practice, towards the greater involvement of the student in the assessment process, has had a positive impact upon the students' perceptions of assessment.

5.4.3 Student perspectives

The importance of student opinions about their assessment experiences is a central message in studies considering the topic of assessment (James 2001, McAuley 2004). In Fuller et al.'s (2004) study a high number of students reported experiencing difficulty with assessment methods in relation to their disability, including coursework (34%), examinations (30%) and presentations (12%). Notably students often associated their experiences with their own difficulties. Similarly, in Hall and Healey's study (2004) students reported experiencing problems with assessment methods as a result of their disability, particularly with written examinations and coursework. Assessment caused the respondents greatest problems (relative to other aspects of the survey), with between 37% and 63% of students reporting difficulties.

Riddell et al. (2004) report staff felt that adjustments to teaching and learning would 'lower standards' and give an 'unfair advantage' to disabled students (p. 23).

Merrill's (2001) study of the perceptions of adult learners found that students had contradictory views about types of assessment. Some expressed a preference for examinations, as they were less time consuming than assignments, whilst others expressed a strong dislike of examinations. She reports that on balance, students' preferred assessment is a topic to be studied in more depth. Students are reported to have altered their perceptions towards assessment over the course of their studies, yet notably with respect to learning 'how to cope with the university system' rather than feeling more positive about assessment, as was found in the research reported previously (Noble et al. 2003, George et al. 2004, Peasgood 2004, Povey and Angier 2004). Whilst Merrill describes students learning to fit the system, in contrast the studies alluded to previously report changing the system to fit the needs of the learner. McAuley (2004) asked 397 students to indicate the perceived importance of different methods of assessment (individual, group, dissertation, examinations, presentations and peer assessment), and their satisfaction with those methods. Students rated the importance of an assessment method greater than their level of satisfaction with the method. Satisfaction levels were higher for individual assessment and examinations (i.e. 'traditional' methods) whereas group work, presentations and peer assessment showed higher levels of dissatisfaction overall. Both McAuley and Merrill demonstrate that student attitudes towards different methods of assessment vary, and such variations demonstrate that students do not always prefer more innovative methods of assessment.

6. Supporting students' success in higher education

Summary

Lack of support has been mentioned as an influential factor in students' decisions to withdraw from university courses, and conversely the existence of support for students has contributed to their successful completion of degree programmes. The first year is often targeted, as this is when the majority of students withdraw. Some students equate personal tutors with general problem solving, particularly for students who do not live at home, rather than a more positive role of guiding the learning process.

Student Services are becoming more centralised and proactive in an attempt to reach students in need. However, better collaboration between support and academic staff is needed to prevent students from 'slipping through the net'. Academics often have a poor understanding of the function of student services and, therefore, do not refer students to such help, and students are uncertain what support is provided. Students may be reluctant to make links with support services because of the stigma that can be attached, particularly mental health services.

Working part-time can act as a barrier to full engagement with studying and not allow enough time to keep up with course demands. Work commitments can lead to missing lectures and early withdrawal. Most part-time employment is not related to the students' course of study. Negative attitudes of families and friends can reinforce some working-class students' feelings of isolation in higher education and even within their community. But some students from working-class communities and ethnic minorities are motivated to do well in HE to fulfil the expectations of families and communities.

The physical environment impacts negatively on students from a range of backgrounds:

- *Academic and other university buildings have physical barriers for disabled students, making socialisation difficult; this problem is compounded by transport difficulties, particularly at night.*
- *Some social spaces are unattractive to certain types of students; much social activity is constructed around alcohol in the evenings, which can cause difficulties for some Muslims and mature students.*
- *On-campus accommodation offers greater opportunities for social networking and engagement.*
- *Attending a small institution could make it easier for students to be known by academics and support staff, providing an informal dimension to formal provision and support.*

6.1 Academic support

6.1.1 Retention and support

Research on student retention and withdrawal tends to identify the role of the institution in this process, rather than placing responsibility solely on the student (Dodgson and Bolam 2002). Castles (2004) identified support for students as a primary issue when considering the reasons for the withdrawal of part-time adult learners from the Open University. She states ‘support figured highest of all in the analysis; mentioned by all interviewees’ (p.175). Further studies linking retention and student support include Warren (2003) and Murphy (2003). In a continuing professional development series about supporting student retention, Sellers and van der Velden (2003) outline ‘targeted learning support’ as one of the principles of retention. They argue that support should be targeted, by either being discipline based, study skill based, key skill based and/or pastoral support. Furthermore, support services and academic departments should work together to ensure that support is linked to students’ study, particularly at critical junctures.

In a study of successful student diversity, Powney (2002) found evidence that institutions are changing towards providing support throughout a student’s career in order to maximise retention. May and Bousted (2004) found evidence that withdrawal was primarily a result of connected issues of student support in various forms and unmet expectations. Lack of support from staff outside the timetable and lack of peer support featured in the top fifteen issues cited as factors affecting students’ decisions to withdraw. Students were reported to have experienced high level of support prior to university and viewed support from staff to be an important aspect of their academic life. They expressed high expectations of the support they would receive and felt let down if it was lacking. It was also noted that students who left in the first semester rated lack of academic support to be a more important issue than students who stayed, indicating the importance of encouraging students to access support from the start.

Other studies making the link between support and withdrawal have focused less on the reasons for student withdrawal and more on contextual factors (Riddell et al. 2002). Thus, Roberts et al. (2003) established that individual factors and career motivation appeared to play a greater part than support received or requested by students. The research employed by Quinn (2004) utilised a participative methodology, involving ex students, to overcome the methodological issue of low response rates faced by studies employing a survey methodology. It argues that ‘personal networks and institutional support are not always enough to counteract structural inequality and cultural dynamics’ (p.4). Such dynamics include an expectation that in a particular area or in a particular institution, many students will drop out. Other authors also stress the importance of taking account of individual contextual (George et al. 2004, Bamber and Tett 2000, 2001). So what is found in different studies depends largely on the approach taken. The overall evidence-base is poor, but it seems unlikely that lack of support is the primary *cause* of student withdrawal.

6.1.2 The timing of support

A number of studies addressing the topic of student support refer to the timing of that support. Bamber and Tett (2000, 2001) note that the challenges for students can be triggered at particular points along the course, including:

- Entitlement to participate.
- Disposition towards course.
- Approach to theory and practice.
- Attitude to professional qualification.

These points relate to stages of the student lifecycle model (HEFCE 2001). Research conducted in the six universities of the North East (Dodgson 2002, Dodgson and Bolam 2002) identified examples of good practice to support retention in higher education, which they grouped into stages of the student life cycle.

Significantly, a number of references covering the topic of support are targeted at students in their first year (Davies et al. 2003, Roberts et al. 2003, Wallace 2003, May and Bousted 2004). This is in recognition that students are at increased risk of withdrawal in their first year of university. Chance (2004) instigated a project, targeted at first-year students and addressing the theme of support, to act as ‘an early warning system’ to the university for students at risk of withdrawal or non-completion. In Gutteridge (2001), the first six weeks are identified as the most difficult period for students, due to financial and social resources being at their most limited and anxiety and expectations for social and academic integration being highest of all. In recognition of the importance of the first year, a project has been initiated at the University of Central Lancaster, designed to improve retention rates amongst first-year undergraduates with vocational qualifications (Jones and Abramson 2003). The intervention incorporates a three-tier strategy – a residential summer school for those who received an offer, an elective first year module entitled ‘effective learning’ and a second elective module entitled ‘mentoring effective learning’ available in year two. The intervention is reported to have supported students’ commitment to the university and the retention of under-represented students. However, as with all of the studies in this section, there is no serious evaluation of these claims.

6.1.3 Approaches to student support

Institutions provide support to students in different ways. For example, some tend to operate at the central level, while others are devolved to departments. Riddell et al. (2002) looked across different higher education institutions at the range of student support mechanisms in place for disabled students. They profile two universities, with distinctly different approaches to student support. The first was more pro-active in organising support and the disability service took a lead in negotiating support in academic departments, yet this provision led to dissatisfaction amongst staff under pressure from the Research Assessment Exercise. In the second university, disability was perceived as a ‘political’ rather than ‘welfare’ issue and thus support was not focused on individuals but on achieving systematic change. Reportedly, students were given responsibility to negotiate their own package of support, which worked well for

some but not for those who needed high levels of support. The second university struggled by being under resourced to achieve their vision. Underlying the account of diverse support practices, described by Riddell et al., is a difference in attitude towards disability. It was found that students were more satisfied with the first university, with better resources, but they were less likely to leave university with a political understanding of disability (which they gained from the second university). As Gutteridge (2003) contends, the delivery of student support is multi-factorial and complex.

Other studies considering different approaches to support across universities include three reports published by Action on Access. An emerging theme in the report by Thomas et al. (2001) was that institutions were responding to the challenge of providing support throughout the student lifecycle. The active involvement of all staff in supporting students was reported as an example of good practice. Layer et al. (2002) focus on the range of additional learning support practices across universities. These include distinctive support for first-year students, a focus on enhancing the student experience through support, the provision of a learning support unit, opportunities for students to determine their individual learning profiles and learning skills, targeted academic support and a summer school for revision and examination techniques.

In a reappraisal of learning support in higher education, Avramidis and Skidmore (2004) developed and distributed a 'learning for all' questionnaire appropriate to the entire student population of one university. The authors found aspects of support that did not meet with the students' satisfaction (including facilities, space, IT). It also highlighted the variability in support provision across the university. The analysis found no real difference between disabled and non-disabled students with regard to the forms of support available or their learning need. Avramidis and Skidmore conclude that singling out 'disabled' students for support is counterproductive to inclusion since students require an 'assessment of need' before receiving support, during which time they are at risk of drop-out. Moreover, a much larger group of students who experience difficulties in learning would benefit from learning support services, yet are deprived of such provision.

One university to trial such an integrated approach for all students is Glasgow Caledonian University (McAllister and Shapiro 2004). Key to this service is a learning development model, which seeks to overcome criticism that central services are separate and detached from teaching activities or that they adopt a remedial model of learning. The development of skills is seen as part of a wider process of personal, academic and professional development. The service has forged links with academic departments and responds to their requests for the delivery of subject-specific workshops for students. It also provides a drop in centre, offers general workshops, runs transition programmes for students entering from FE and provides staff development activities to academic staff. The centre encourages students to become aware of how they learn and enables them to manage their own study strategies.

Additional examples of integrated support models are provided by staff at Southampton Institute (Smith et al. 2005) and London Metropolitan University (Warren 2003). Smith et al. report on the introduction of an institute wide facility, namely Students 1st, to provide 'an holistic, integrated and partnership approach to

supporting student learning'. The component parts of Students 1st include a centrally located information centre, a student support network, a spiral induction programme and specific information, advice and guidance points. The facility is well advertised and used by students, and is reported to have had a significant impact on student retention rates. The formulation of a new teaching and learning strategy underpins work at London Metropolitan University to enhance student retention (Warren 2003). A team approach to retention has been introduced, with the goal of fortifying connections between teaching, and student support and learning development. However, as with all of the studies above, there is no evidence of actual effectiveness or efficiency.

6.1.4 Personal tutoring

Research into retention and non-completion in HE by York St John University College (Davies et al. 2003) found that personal tutoring was an important contributory factor. Their questionnaire provided evidence that staff perceived the academic/personal tutor as playing a key role for students facing difficulties. Other studies identified personal tutoring as an issue in relation to retention (Dodgson and Bolam 2002, Noland 2003) and widening participation (Thomas et al. 2001, Morgan and Lister 2004).

Owen (2002) explored personal tutoring in one faculty, with comparisons at four other institutions. In the target university, each student was allocated a personal tutor. Students appeared satisfied with the personal tutor system but further investigation revealed their expectations of the system were low. Students overwhelmingly considered that the role of the personal tutor was to solve problems, despite the university perceiving tutors having a dual role – to monitor, guide and advise academic progress and to assist students with problems. Castles (2003) identified two aspects that were particularly essential for a good personal tutor – availability and approachability. This is supported by Davies et al. (2003), where an 'informed, sympathetic and speedy response' from a personal tutor was considered to be necessary for students facing difficulties, Avramidis and Skidmore (2004), and Askham (2004).

In Owen (2002), comparison with other universities revealed two models of personal tutoring:

- The pastoral model – students are allocated a personal tutor to whom they can turn for academic or welfare support.
- A pro-active, structured model – students are called to see their personal tutor at regular intervals throughout the year.

Whilst she argues that a varying range of systems can (and do) work within universities, the research indicates the necessity for a more structured approach, which is less dependent upon 'the work schedule or goodwill of individual members of staff' (p.20). A consistent feature amongst those systems that work well was that student support was made a high priority at both university and departmental levels.

6.1.5 Peer support

The importance of peer support networks is highlighted in a study on student retention (May and Boutsted 2003). In a continuing professional development series (no. 4), on supporting the first year experience, Wallace (2003) focuses on a peer tutoring programme for students at London Metropolitan University, termed supplemental instruction. Second-year students lead and facilitate a group of first-year students, in generating solutions to their own difficulties. The students meet on a weekly basis and are encouraged to think about their learning. Asbee et al. (2000) report on a small scale project to mentor new students entering the Open University on an distance learning course. Their research is premised on an assumption that mentoring may be effective in overcoming the particular barriers faced by students studying at a distance. They used volunteers who had recently completed that course and found it to be successful both in terms of supporting access and students' subsequent progress.

6.2 Social and non-academic support issues

6.2.1 Student support services

The investigation by Layer et al. (2002) found that at the institutions involved, student support services were becoming more centralised and proactive in an attempt to reach students in need. For example, one university had developed an information centre that acted as a single point of contact, where students could access help or be referred. However, this research highlighted a need for better collaboration between support and academic staff to prevent students in need from slipping through the net. Ozga and Sukhnandan (1998) reported that academics they interviewed had a poor understanding of the function of student support services and, therefore, did not refer students to such help. Similarly, students involved in this research that had not completed their course were often aware of, but uncertain about, the provision offered by student support services. Consequently, they did not generally access such assistance prior to withdrawing.

Noble (2004) suggested that assistance needed to be accessed as early as possible by students thinking about dropping out. These findings imply that better awareness raising about student support services is required (Dodgson and Bolam 2002, Thomas et al. 2002).

6.2.2 Part-time employment

Working part-time was noted as difficult in all studies that examined this aspect of student life. For example, participants in Bamber and Tett's (2000) investigation stated that part-time employment could act as a barrier to full engagement with their degree, although steps had been taken by the organisers of their course to structure timetabling to account for part-time work commitments. Participants who had worked part-time as students, referred to in Noble (2004), generally did so for more than the maximum 12 hours recommended by the Select Committee on Education and Employment, which led to difficulties in their keeping on track with university demands. Likewise, by the end of Walker's (1999) longitudinal project, two-thirds of participants were engaged in part-time employment, many working for more than 20

hours a week. Only one individual was in a job that related to his/her course. Unfortunately, the majority of students in this research who worked part-time still experienced financial struggles.

Case study material presented in Thomas et al. (2001) implied that for some individuals part-time work was essential to enable them to complete their course, whilst for others it was undertaken to fund their attempts to fit in with a middle class lifestyle. A lack of money in comparison to friends who worked full-time was depicted as hard, as was returning to a student income for older learners who had been accustomed to earning a wage (Thomas 2002). Research also reports that the pressure of having to work could lead to individuals missing lectures, which played a role in some people's decision to leave university. Bamber and Tett (2000) noted that part-time employment could impact on academic success. For example, those who worked shifts found it hard to accommodate their studying. Participants in this study who had supportive employers, who gave them time off to study, were valued. In contrast, some interviewees recalled that attempts to apply what they had learnt from their course in the workplace were met with resistance from colleagues.

6.2.3 Friendships and family

Students can receive support, or conversely antagonism or a lack of support, from family and friends, which can impact on their higher education experience. Generally relatives were reported as a major source of support by students in reviewed papers (Borland and James, 1999, Higson et al. 2003, Riddell et al. 2004). Some, however, face pressure from the negative attitudes of family members and friends. For example, Bamber and Tett (2000) wrote that the working-class students participating in their project often felt a lack of entitlement to higher education, related in part to their past experiences and internalised beliefs, and heightened by negative attitudes from friends and family towards their decision to embark on an academic path, and from living in a community that did not value education and had little knowledge or understanding of university. This could, according to interviewees in this study, jeopardise their relationships with old acquaintances, with some individuals expressing concern about being marginalised within their community for taking part in higher education. Similar issues were reported by Quinn (2004).

Children were another problem for some students taking part in the research by Bamber and Tett (2001), who reported that sons and daughters could feel abandoned by a parent's decision to undertake a degree, leading to behavioural problems in some young people – although, of course, they present no real evidence of this, or any other such, claim to knowledge of a causal model by the participants themselves. More positively, this study noted that for other children, seeing their mother or father at university raised their own educational aspirations. In addition, students in this project felt as if they were carrying the banner for their community, showing that someone from a disadvantaged background could do well in the world of academia. Consequently, in some cases, pursuit of a degree was regarded as both a personal goal and an action for the community, which motivated learners to succeed.

The research by Higson et al. (2003) suggested that ethnic minority students were particularly influenced to attend university by their parents. These students talked about being motivated to achieve by their parents' expectations and to make the best

of opportunities that had not been available to their mother and father. Similarly, Quinn's (2004) article suggested that working-class students who were the first in their family to attend university felt pressure from their parents to succeed. Working-class students involved in this project, as discussed by Noble (2004), did not take the decision to withdraw lightly, feeling that they would be regarded as a failure, lacking in perseverance.

Course mates were also referred to as important source of support, according to Bamber and Tett (2000). Developing social networks and a sense of belonging within a university were reported as notable factors in students' deciding to continue with a course by Thomas (2002), especially when old friends had become distant because they were not involved in higher education. In light of this, some institutions have developed approaches to promote social networking. For example, at one university used as a case study by Thomas et al. (2001), steps had been taken to make teaching and learning interactive (e.g. through the use of group work).

Students with a disability referred to in the paper by Borland and James (1999) discussed the benefits of attending a 'Students with Disabilities' group, which provided them with an arena to meet others and to exchange ideas. However, one participant commented that the group did not take enough action, but was rather a place for simply talking. Mature students were also given the opportunity to forge social networks with similar learners, according to the investigation undertaken by Dodgson and Bolam (2002), especially during the induction period of academic life. For example, one establishment used as a case study in this research had devised a mentoring scheme at which a new mature student was paired with another who had been at the university for a year, the latter being there as a source of informal advice and guidance for the former.

Although forging networks with other students was proposed in reviewed literature as playing a fundamental role in an individual's decision to persist with a course, Layer et al. (2002) found that socialising could be overshadowed by competing demands on students' time, such as childcare, travelling and part-time work. This links to the finding from Rhodes and Nevill (2004) that balancing their personal life with university demands was rated as the most problematic aspect of university experience. Yet it is not only finding time to study that can create complications, finding space at home to carry out academic work was also noted as problematic by students interviewed by Bamber and Tett (2001).

6.2.4 Facilities and estates

Accommodation was discussed in research included in this section of the review. In Thomas (2002), living with other students was said to have helped individuals appreciate that they were not alone in their struggles with money and workload.

Living at home, although financially beneficial, can lead to a sense of being marginalised from university life (Tett 2004, Thomas 2002). A number of ethnic minority students involved in the research by Higson et al. (2003) recalled that their parents had encouraged them to study locally and to live at home, which led to them missing out on social events. Likewise, three-quarters of the young working-class students involved in the project discussed by Noble (2004) lived at home, for financial

reasons, half of whom believed this had impeded their ability to integrate socially at university. The University of Newcastle has set up a pilot 'Home Affiliation Scheme' to support students living at home by giving them access to the facilities available in halls of residence.

On the other hand, foundation degree students involved in the study by Dodgson and Whitham (2004), who were mainly mature females, welcomed the chance to study at a local college, regarding it as familiar. A quarter of these respondents were attracted to their course because it enabled them to study close to home and work. Some other students selected their institution because it was close to home and, thus, allowed them to draw on existing social networks and family (Riddell et al. 2004).

6.3 Findings for specific non-traditional student groups

6.3.1 Mature students

Preconceptions about universities as elitist were referred to in Bamber and Tett (2000) as barriers that mature working-class students had to overcome to succeed. Students involved in this investigation depicted themselves as the 'other' within university, feeling out of place because of their clothes and because they felt less able compared to traditional students (Tett 2004). As they continued with their course they became more confident about their position as part of an academic establishment. Organisers of the course involved in this paper recognised that mature students might have particular difficulties, which they strove to accommodate by having flexible timetabling, to allow for part-time work, and by encouraging students to value learning experiences of all kinds and from all sources.

On the other hand, Carney-Crompton and Tan (2002) found no difference in levels of anxiety between young and mature female students, even though the former reported having a greater selection of individuals available for support. As in so many topics in this review the assembled evidence on any question is both weak and inconclusive.

Life circumstances are more likely to push mature students into withdrawing from their course, compared to younger students, according to Ozga and Sukhnandan (1998) who concluded that older learners need greater institutional assistance to overcome external pressures, such as more flexibility in the duration of their course. Tett (2000) noted that mature female students were more likely to talk about having to juggle home life and studying, whereas males seemed more able to separate their personal/domestic self from their academic life. Yorke (1999) also found differences between male and female respondents on full-time courses, with the former more likely to say that they had dropped out of university for financial reasons, or because they had chosen the wrong course, whereas the latter stated that the demands of dependents and being unhappy with the social environment had influenced their decision to leave. This links to Dodgson and Whitham's (2004) finding that 36% of foundation degree students involved in their study had contemplated withdrawing. The main reason given by these mature females was the pressure of working, studying and being responsible for a family, as well as returning to education after a long absence.

Some mature students seem more able to accommodate studying than others, according to research undertaken by Winn (2002). This author divided interviewees into mature students with lots of commitments who managed to make time for their studies and those who had lots of commitments but carried out little academic work. The former were said to have made and accepted sacrifices in terms of social activities and family life, with support from their partner described as vital. For the second group of students, day-to-day life was depicted as a struggle. They only put the minimum of work into their studies, believing it was impossible to make time to do more (even though they had less employment commitments than the first group).

The specific support needs of mature students do appear to have been given special consideration in some higher education establishments, as reported in the case studies outlined by Dodgson and Bolam (2002). For example, one institution involved in this research held a special introductory conference for mature students, at which they were warned of the problems that could arise in their current relationships as a consequence of embarking on a degree, and they were encouraged to approach personal tutors should such difficulties transpire. Another university had a special induction event for mature students and their families so everyone in a household understood what university entailed. At this event, mature students were encouraged to seek support and not feel guilty about doing so. Thomas et al. (2002) found that older learners were happy to be depicted as a specific group (i.e. mature students) and welcomed targeted services (e.g. a mature student's adviser). However, it was noted that these individuals could be wary about accessing certain provision, such as counselling, which they regarded as being for their younger peers.

Students from lower socioeconomic backgrounds taking part in a Cooke et al. (2004) study engaged in fewer non academic activities (e.g. sport clubs or societies) and spent less time socialising compared to those classed as 'advantaged'. This might have related to the fact that these students were more likely to be in paid employment whilst studying compared to their advantaged peers. Part-time employment was a bigger influence on working-class students' deciding to withdraw compared to those from middle or upper classes. Finance also played a role in the decision of working-class students interviewed for the study reported by Noble (2004) to leave without finishing their degree. But this was only one of several factors, such as loss of interest in their course, a career change or choosing the wrong subject. Students in this project did not necessarily regard their non completion as negative, feeling relieved from the pressures they associated with university after they left. However, this was tinged with sadness at having wasted time on a course they did not complete.

6.3.2 Disabled students

The survey carried out by Riddell et al. (2004) reported a promising finding in that most participating institutions had a disability officer and a senior manager with responsibility for disability issues. The provision of such services could play a role in an individual's choice of university. For example, in a journal article based on this report, Riddell et al. (2002) wrote that one interviewee talked about selecting her university after a positive conversation with its wider access co-ordinator. Another said he had been told that other local higher education establishments had access problems. Hence, choice of university is not always academically related.

Students involved in the Riddell et al. (2004) study talked about not wanting to be defined by their disability, regarding other parts of their persona as more important (e.g. their religion or their sexuality). However, they recalled having to promote this aspect of themselves to get their needs met. Likewise, Borland and James (1999) suggested that coming to university forced individuals to be more aware of their impairment, which previously had been accommodated into daily life and was not an issue. Entering a new environment meant they felt as if their disability was more public, in part because, as noted above, it was necessary for them to highlight this to have their needs met. Getting students to declare their disability (if non visible), which is essential before they can be provided with required support, was said to be difficult by Dodgson and Bolam (2002) and Thomas et al. (2002). Individuals might start higher education without all their support systems in place, giving them a negative introduction to university life. Students with a mental health problem or with dyslexia, in particular, suffered in this way, only receiving an assessment of their needs once their situation was overwhelming.

One university used as a case study by Dodgson and Bolam (2002) had a dedicated service for those with a disability, which offered individuals one-to-one sessions with an advisor, produced a newsletter for disabled students, and worked closely with academic staff to raise their awareness of disability issues, although other research suggested that it could be difficult to get staff to participate in such training (see Thomas et al. 2002).

6.3.3 Ethnic minority students

Thomas et al. (2002) suggested that institutions had to acknowledge the discrimination faced by ethnic minority students from within and outside higher education, and that student support services had to help to combat such problems. In some cases, it might be that ethnic minority students experience greater financial complications and more difficulties relating to others compared to those classed as 'white' (Yorke 1999). Higson et al. (2002) noted that participating ethnic minority students felt less able to discuss problems with lecturers compared to their white British peers, relying on family and friends as sources of support. These individuals were also less satisfied with the learning environment provided by the business school being examined in this research, compared to their white British counterparts.

7. Organisational change: Implications for the access and retention/success of non-traditional students

Summary

Some research indicates the need for institutional development to improve current provision to better meet the needs of students from under-represented groups, and a more limited body of research calls for more fundamental change in all sites of HE learning, including the FE sector and community settings. The culture, ethos and values of the institution can either reinforce existing social inequalities or oppose them. There is considerable variation between institutions in the acceptance of non-traditional qualifications.

Staff from visibly under-represented groups might act as role models for students from these communities. There is a lack of staff-related activities to support widening participation, and a lack of staff awareness about the needs of disabled students in particular.

Structural flexibility enables students to fit studying around other responsibilities. Changes include ICT and distance learning, off-campus delivery, part-time study, timetabling, changing programmes, and extended academic year. Widening participation has an important local element as some students from under-represented groups are less willing to travel or relocate to participate in HE. Therefore all institutions should seek to attract local students; otherwise participation may reinforce and exacerbate existing social divisions. Widening participation can result in increased institutional costs, but it is likely that the institutions with higher numbers of non-traditional students have lower units of resource per student.

Partnerships are a key strategy to both promote access to higher education and to change the structure and contents of HE provision, but collaboration poses practical, organisational and cultural challenges. The review found no evidence that partnership provision of new programmes and/or in new locations increases the numbers of students from under-represented groups entering HE.

7.1 Institutional change

7.1.1 The need for institutional change

The first question that should be posed in this section of the review is whether institutional change is required, to attract and retain students from different under-represented groups and in universities, colleges, FE sector and community-based HE.

From an institutional perspective Foskett (2002) discusses whether widening participation is simply a marketing challenge (to reach those who have never considered post-compulsory learning) or a cultural challenge. He suggests that it 'is inherently a challenge to internal institutional culture that requires colleges to change fundamentally their modus operandi, their view of the world and their values'. Similarly, Bowl (2001) reports that the institutional context is unresponsive to the

needs of students from non-traditional groups, and that this impacts negatively on the experiences of mature minority ethnic students. The need for institutional change, especially in relation to mature students, is supported by research by Ozga and Sukhnandan (1998) on student withdrawal. Research with mature working-class males finds that universities themselves need to change if they are to offer an image and environment that will appeal to these types of students (Marks 2000). Evidence that institutional change is required if students from non-traditional backgrounds are to thrive in HE is also presented in Layer et al. (2002).

With regard to the FE sector, Foskett (2002) finds that widening participation is firmly established at the strategic level, but this has not impacted on the culture of institutions, due primarily to the project-based nature of much widening participation activity and limited awareness of the complexity of needs and wants of current non-participants. Atherton and Webster (2003) use case study evidence to argue that institutional change, as well as individual, family and community change, is necessary to enhance the retention of students from under-represented groups, a point supported by Bamber et al. (1997). Longden (2000) finds resistance to institutional change, as the HE sector wants to retain elite instincts and traditions, and thus there are inherent tensions between HE policy and the aspirations of the sector. A similar point is made by Marks (2000).

So, there is a near consensus among the commentators presented here of the need for institutional change, but there is little critique of the idea and little balance in the presentations. If, for example, the culture or institution of HE changes to accommodate extra diverse students, then where is the research evidence on what the impact of this will be on the majority of pre-existing students (the ethical dilemma in Gorard 2002b)?

7.1.2 Institutional commitment

The following elements of institutional commitment to support student retention and success have been identified from a broad body of research evidence (Dodgson and Bolam 2002).

A strategic commitment throughout the student lifecycle

A strategic approach to widening participation implies that it informs all of the institution's activities and that it is planned and coherent, rather than confined to isolated project activity that is dependent on additional income (Duke 2003). Dodgson and Bolam (2002) find in their large, mixed methods study in the north east of England that all of the region's six universities have adopted the student lifecycle model for thinking about student retention and for delivering services in support of student success. This they argue is 'demonstrative of the region's universities' strategic approach to student retention'. A further indication of a strategic commitment throughout the student lifecycle is the relationship between widening participation and other aspects of the student experience. For example, both Layer et al. (2002) and Dodgson and Bolam (2002) find links between widening participation and teaching, learning and assessment, staff development and other strategic documents. Institutions are also developing student retention strategies and improving links between retention and the first-year experience and student support and guidance. But none of this activity is independently evaluated.

Targets, monitoring and institutional research

Using a range of evidence, including institutions' 2001 widening participation strategies, Layer et al. (2002) found that institutions have 'begun to take on board the need to support students to succeed' (p.19). A key aspect of this is the increased setting of institutional student success targets, and the use of monitoring data to assess purported progress towards these. Targets may be set at the institutional level or individual school or department level, and they may be qualitative or quantitative. They need to be accompanied by sufficiently detailed and robust tracking systems to be of greatest value. Woodrow et al. (1998) and Woodrow et al. (2002) in a series of widening participation case studies found that institutions and WP partnerships generally have poor tracking data, and are often unable to assess the impact of their interventions.

Willingness to change the product in response to new learners

Duke (2003) shows how the change of institutional leadership can have a negative impact on partnership arrangements and other WP activities within an institution. Foskett (2002) argues that widening participation (at least in the FE sector) requires two key developments: 'a commitment across institutions to adopt the values of inclusion and extend provision to non-participating groups' and 'the establishment of a marketing culture... grounded in responsiveness' (p.86). He found in a sample of five FE colleges that there was a clear understanding both of the need to undertake responsive marketing to achieve widening participation goals, and that this requires going beyond selling existing provision. In both planning documents and interviews with senior staff there was a strong commitment to market research and evidence-based decision making. But, interviewees recognised a gap between commitment and the implementation of plans – with volume of work often resulting in promoting existing initiatives rather than listening to potential students and developing appropriate courses in response to their needs. In the context of HE, Johnson (2001) argues that institutions need to go beyond marketing of products to the nurturing of relationships with clients/lifelong learners. Foskett (2002) uses the failure of the majority of FE colleges to reach their challenging expansion targets in the mid-1990s as evidence that insufficient cultural change had occurred to embed the type of responsive marketing culture that is required.

7.1.3 Institutional culture and values

The culture, ethos and values of the institution can either repel or encourage students from under-represented groups and indirectly hinder or support their success (Thomas 2002). Read et al. (2003) argue that students from non-traditional backgrounds are disadvantaged by an institutional culture that places them as 'other'. For example, the typical student is often assumed to be young, and with no other responsibilities – and this influences policies, practices and projections about HE, flexible timetabling or childcare facilities are special requirements and not the norm. Similarly ethnic minority students may not want to attend institutions where they are an isolated minority, and working-class students report being put off applying to certain institutions which they feel are snobbish (Read et al. 2003). Parker et al. (2005) and Thomas (2002) found that academic staff's attitudes were influential in assisting students to feel comfortable, or otherwise, with the academic culture. This evidence points again to the need for changes in academic practices.

7.1.4 Admissions and alternative routes

Many of the examples of how institutions are widening participation look at how admissions to HE have changed (Woodrow et al. 1998). Watson (2002) reports a wide variation in the acceptance of non-traditional qualifications between institutions, with some institutions accepting less than 1% of applicants with these qualifications to some institutions accepting in excess of 70%.

Credit accumulation and transfer, and the recognition of prior (experiential) learning – AP(E)L – offer alternative routes into HE, particularly for mature students (Dunlop and Burtch 2003). Such an approach requires compatibility between institutional programmes, full recognition of credit awarded by other institutions and overcoming negative views about (potential) students with non-standard entry qualifications.

The HE system in England is not obviously structured to provide compatibility between programmes, for example between FE courses and HE provision, or between HE providers (unless by special arrangement) to ease transfer from one institution or sector to another (Osborne 2003). This can be contrasted with other countries such as the US where greater flexibility is possible due to more generic courses in the early years. McGillivray and Knox (2003) examined institutional data for 1,794 students at the University of Paisley, considering entry qualifications and degree classifications. They found that 65% of the graduate population but only 41% of honours graduates used APL to enter into their programme at the university. Further investigation showed that a primary reason is because an honours route is not available to part-time students – affecting many of the students using APL. The analysis showed that at honours level students with Highers/A-levels perform better than HND entrants but not HNC or other entrant qualifications. This suggests that admissions tutors can accept students with credit from various qualifications with few concerns about their ability to cope and gain an exit award. But, research by Quinn et al. (2005) in four institutions with credit accumulation policies suggested that students were not informed about the possibilities and often left the HEI without any credit, rather than either transferring to a different programme or collecting their credit for use in the future.

Dunlop and Burtch (2003) present a case study from one institution in Canada about a programme especially designed for mature students in employment and/or with home responsibilities. A key aspect of this programme is the recognition of prior learning. But, their evidence shows that other practical and structural barriers need to be overcome too, to provide access for these students – for example financial barriers caused by tuition fees, admissions processes that do not provide access to certain courses, and inflexible and sometimes irrelevant course content.

7.1.5 Pedagogical change

A key area for institutional change is teaching, learning and curriculum development. Parker et al. (2005) found that those institutions that have been successful in widening participation have developed a diversity of teaching and other practices that is appropriate to the needs of a mass sector. Layer et al. (2002) explore the extent to which institutions are linking together their widening participation and learning and

teaching strategies, and the impacts of this. They find that less than a third of HEIs have explicit links between the strategies. Instead the emphasis is on the provision of additional learning support, including pre-entry and additional skills modules and drop-in facilities. In a survey of HEIs, Riddell et al. (2004) found that policy development is still required, especially in relation to learning and teaching, for disabled students. This requires embedding disability into all institutional policies and procedures, which will benefit all students, but this is not happening at the moment. Institutional research by Avramidis and Skidmore (2004) confirms the importance of mainstreaming disability learning and teaching strategies. Parker (2001) finds that the majority of non-specialist staff were aware of the general difficulties encountered by students with disabilities, but more detailed knowledge about the impact of specific disabilities on learning and teaching was limited.

Non-traditional students, particularly mature learners, need introductory level courses. This is because 'non-traditional' students have to negotiate the largely unwritten 'rules of the game' of university life (Read et al. 2003). Bowl (2001) identifies the need for tutors to de-mystify what they expect of students. Keenan (2005) has demonstrated the effectiveness of a pre- and post-entry induction programme to familiarise students with institutional practices and to prepare them for academic study in their chosen discipline. This approach has the added advantage of freeing up time, so that academic teaching can start without delay – which both students and academics value (Wallace 2003).

Dunlop and Burtch (2003) reveal that in some courses the content is irrelevant to some mature students with employment experience, but the content is inflexible and there are no structures or strategies to overcome this shortcoming. Malhorta et al. (1999) found that 'course offering' was a significant issue for adult learners, including the fact that the courses people wanted to study were not available, or they were not available at a time when they could attend. Parker et al. (2005) identified the importance of sensitively designed assessments to meet the needs of students, including their other commitments.

7.1.6 Student support (see also Section 6)

Layer et al. (2002) and Thomas et al. (2002) found that institutions are developing 'one-stop-shops' to provide student services, but there is no evidence that these are an effective way of delivering services, reaching students who would not otherwise use them and improving student retention and success. For example, there is evidence that the students who most need to access student support are the least likely to do so (Dodgson and Bolam 2002). Askham (2004) also notes that mature students are more anxious about returning to study and require higher levels of support. In particular, Askham argues that the academic support infrastructure can be developed to build skills, confidence and trust – e.g. via skills development and personal development planning. Malhorta et al. (1999) found that lack of childcare was a significant barrier to participation in education for potential adult learners in the US.

Quinn et al. (2005) show that many students receive little or no advice and guidance from the institution prior to withdrawal. In some instances they receive very poor quality advice. Students were not aware of their options or other possibilities, such as changing their mode of study, switching to another programme or claiming credit for

their study to date. This suggests that a more proactive approach is needed to support students as they decide to leave, and to consider other possibilities. Peel et al.'s (2004) study in an institution in Australia also draws attention to the need to support students on leaving. This not only ensures that students make the best decision to suit their circumstances, but there is a greater possibility of them returning to learn at the same institution. Quinn et al. (2005) found that of the 67 students who withdrew, 20 had firm plans to return to HE, the majority planned to at some time, and only one did not want to participate in HE again.

7.1.7 Staffing: role models and development

Taylor (2000) reports on two research studies that demonstrate the importance of the inclusion of students from ethnic minorities. One approach he identifies is via staff role models. If members of 'under-represented groups', such as specific ethnic minorities, do not work in the HEI (in any capacity), the institutional space can remain alien. Community engagement can be increased via employment, with a positive effect on student recruitment. Furthermore, ethnic minority academics provide a direct role model for students from these groups. Despite the efforts to widen the diversity of the student population there appears to be little research or effort to consider the impact of the staff population on recruitment and retention of students from under-represented groups.

It is striking that amongst all the references about higher education, there are so few articles explicitly addressing staff development. These few studies highlight a need for staff development to support the learning experience of students from non-traditional backgrounds. Non-academic as well as academic staff need to be included in staff development activities to support widening participation (Dodgson and Bolam 2002). Srivastava (2002), using institutional case studies, found that there was relatively little evidence of staff development taking place specifically to support the widening of participation and increased student diversity. She identifies the challenge of addressing all areas of the student lifecycle in staff development – working outside of the institution as well as evaluating and changing practices within.

Research focusing on disabled students also finds a lack of adequate staff development. Based on a small postal survey amongst those responsible for staff development, Parker (2001) found a lack of awareness and understanding amongst staff of the difficulties encountered by disabled students, including both academic issues and social isolation – and the impact on all aspects of the student experience. The findings suggest a need for closer liaison between staff in disability services and those providing more general staff development. Similar issues are raised by Fuller et al. (2004).

7.1.8 Structural flexibility

Many non-traditional students have 'the unenviable task of balancing the heavy, and often conflicting demands of work, family, life in general, and the requirements of the course' (Bamber and Tett 1998, p.469). Structural flexibility is therefore of paramount importance. The literature identifies the following issues:

ICT and distance learning

In an international study Osborne (2003) finds that ICT and distance education are used in Finland and Australia to provide access to higher education in rural and sparsely populated areas. Similarly in the UK, Dodgson and Bolam (2002) found that ICT was widely used in the six universities in the north east of England to improve the flexibility of learning opportunities. Dhillon's (2004) focus groups with adults learning at learndirect centres found that learning on the doorstep – proximity to home and convenience for travel – were strong factors influencing their participation in this type of learning. This was coupled with the flexibility this learning environment offered, in particular the learners valued the opening hours, the lack of a specific requirement to attend at pre-specified times and the ability to arrange to drop in for learning at times to fit in with their other commitments. These studies do not have evidence from students that ICT does attract new students into HE in the UK who would not otherwise have enrolled, or that it makes their retention and success more likely.

Osborne (2003), drawing on the work in Australia by Postle et al. (2002), recognises the potential limitations for access to ICT-based distance learning by students from lower socio-economic groups. The cost of an internet service provider and the time it takes to download material could be prohibitive. This barrier is reportedly reduced by learndirect centres. However, a major study by Selwyn et al. (2005) showed that studies such as those above are biased in their use only of participants in education. From the point of view of non-participants, virtual and distance provision relying on ICT actually reinforces the barriers to participation that it is meant to overcome.

Off-campus delivery

Pickerden (2002) shows how part-time community-based provision can meet the needs of Muslim community groups, particularly women. Payne et al. (2005) report on the University of Glamorgan's response to address lifelong learning in a low participation, socially deprived and disadvantaged area in Wales. One of the developments includes the delivery of a community-based lecture series namely the 'culture train' and delivery in community premises to aid access for students. Dhillon (2004) offers a further example, forming part of a wider study of partnership working at the University of Wolverhampton, in which students are offered computer-based learning provision across a range of centres, in community-based organisations, further education colleges and private education providers. When students were asked how the centres had helped them participate in learning, several aspects of the physical, social and psychological learning environment emerged (Dhillon 2004). These include location (proximity to home, convenience), flexibility (of opening hours and attendance), learning environment (suitable to engage with learning), tutor/learning adviser support (value and availability of face-to-face support), peers (social activity), and advice and guidance on progression routes. Dhillon argues that the deeper and hurtful experiences that students expressed cannot necessarily be addressed by tinkering with the learning environment or learning materials.

Pickerden (2002), on the other hand, focuses on the costs/benefits to institutions, which she terms to be the 'drivers' and 'resistors' for widening participation by students from non-traditional backgrounds. She outlines the challenge of working across several institutions, with community organisations, and trying to reconcile the timescales posed in higher education of enrolment and work deadlines, and resources.

Moreover, she argues that the benefits to the institution are ‘immense’, including providing ‘another generation of potential students’ as well as students moving from part-time to full-time study.

Part-time delivery

There is a lack of evidence about the benefits, or otherwise, of part-time studying for students from under-represented groups. Woodrow et al. (2002) found little evidence that part-time provision attracts young students from lower socio-economic groups into HE.

Timetabling and course structure

Timetabling needs to match both students’ needs and their other commitments. Mature students in particular would find it easier if they received their timetables earlier in the year to help make arrangements with regards to other commitments such as childcare and employment (Dodgson and Bolam 2002). Bamber and Tett (1998) found that inflexible course arrangements disadvantage adults with domestic responsibilities. Quinn et al. (2005) found that even in post-1992 institutions with a commitment to supporting widening participation there is a focus on full-time continuous study, in particular, students have little opportunity to switch to part-time and tend to leave rather than change mode of study. Intermission and re-admission is viewed as problematic and students are not generally supported with this process, thus the concept of lifelong learning is not fully embraced in practice.

The University of Luton piloted the Extended Academic Year – teaching three rather than two semesters a year, thus allowing accelerated completion of study – over a three-year period (Fallows and Symon 1999). The scheme was particularly attractive to mature students and those in employment. The evaluation was formative. Questionnaires and focus groups were used to gauge students’ opinions, and a survey was sent to potential students. The prospect of learning during the summer is more attractive to part-time than full-time students. But the research does not provide evidence that year-round learning would attract new students into HE (Harris and Fallows 2002).

7.2 Local, regional and national issues

7.2.1 The persistence of class inequalities

At the broad level inequalities in participation by women, mature students and some ethnic groups have been overcome – although institutional and disciplinary differences remain (Universities UK 2001, Watson 2002). Participation has increased by young people from the lower socio-economic groups. But, as is noted elsewhere in this review, stark differences in participation rates remain between the children of professional parents and the children of unskilled parents (National Statistics Office 2000, reproduced in Watson 2002). This remains a challenge for the sector, and suggests that much of the activity that has taken place to date has not had a significant impact, or the full effects of the interventions have not yet been realised (e.g. young people have not reached HE entry age yet). It also suggests that class should be the focus of future widening participation activities. This is further supported by research

that indicates the mediating effect of class (in particular parental educational background) in relation to other equity groups, such as disability (Riddell et al. 2002).

7.2.2 Local provision

Thomas et al. (2001) propose that widening participation is predominantly a local as opposed to a regional activity. In addition, Quinn et al. (2005) in relation to working-class students, Universities UK (2001) in relation to students with lower entry qualifications, Marks (2000) in relation to mature students and Pickerden (2002) in relation to Muslim women, found that some students from under-represented groups prefer to go to a local HEI. Local HE provision appears to be offering some students from under-represented groups new opportunities, but there is a danger that these students receive a worse HE experience than peers who move away from home and have greater institutional choice.

7.2.3 Differentiation and mobility in the sector

Institutional differentiation in the HE sector may disadvantage students from under-represented groups. Middle class students opt to go to more elite institutions (reflecting their knowledge of the HE system, greater mobility and higher entry grades). This reinforces their advantages and allows them to reap further benefits (Leathwood 2004, Marks 2000, see also Section 8). This suggests the need for greater movement between institutions (particularly of different types). This is discussed above in relation to credit accumulation and transfer. Osborne (2003) finds that examples of institutional flexibility of this nature are not widespread. Institutional status in the hierarchy is related to the profile of the student intake, thus there are limited incentives for institutions to introduce this type of flexibility. Longden (2000) suggests that if greater flexibility and mobility is not introduced into the system, retention and completion rates will decline overall. Of course, all of these differences could be explicable in terms of prior qualifications.

7.2.4 Partnership and collaboration

Regional and sub-regional partnerships are a key strategy to promote access to higher education (in a wide range of learning sites) and to change the structure and content of HE provision. For example, partnerships can provide more local access to provision (Coles and Smith 1999), and they can be used to change the provision – by developing the curriculum to meet the needs of different stakeholders (Foskett 2003). Local or regional partnerships also offer a way to overcome issues of institutional differentiation and to facilitate mobility in the sector.

Collaboration however poses practical, organisational and cultural challenges for partnerships between HEIs and FECs, and market pressure and funding methodologies create further tensions. For example, Foskett (2003) found that shared strategic aims were important, but these could be undermined by unstated aims. Coles and Smith (1999) identified three sets of factors critical for success: clear objectives and commitment to an agreed strategy, a focus on the people in the partnerships, and results oriented procedures. Doyle (2001) found that the collaborative capability of the university in particular was limited and limiting to the partnership as a whole. Woodrow et al. (1998) offered criteria for effective partnership: minimising the

number of partners, clarity of purpose and benefits, effective resource use, shared ownership and effective and cost effective structures. These are reflected in partnership literature more broadly, but there is less evidence of how to achieve some of these goals.

Changing the location and type of provision and facilitating progression into HE from other learning is beneficial if this results in more students from under-represented groups entering higher education. Foskett (2003) presents evidence from two foundation degrees (healthcare and childcare) at the University of Southampton that between 70% and 80% of students 'met at least one of the widening participation criteria' (ethnicity, disability, lower social group, non-standard education). Doyle (2001) offers indicative evidence of the positive effect of FE/HE partnerships. In one institution in Greater Manchester, which has had an FE/HE consortium since 1993 aiming to enhance the progression opportunities of 'non-traditional' students into HE, over 30% of the entrants were from lower socio-economic groups in 1999-2000. This can be compared with an average of 24% from these groups for all of Manchester. These pieces of evidence alone however do not demonstrate that partnership provision – of new programmes and/or in new locations – increases the numbers of students from under-represented groups entering HE, but it does suggest that these programmes are attractive to them. The question remains as to whether these students would have entered alternative provision if the partnership provision had not been in place.

7.2.5 Institutional funding and resource issues

Between 1994-95 and 1998-99 student numbers increased by 18%, but income only rose by 7% during the same period, and this was mainly through additional sources of income rather than planned public expenditure (Universities UK 2001). But expansion in both numbers and income is not uniform across the sector, and a majority of institutions are operating below the 3% retained surplus recommended by the funding councils (Watson 2002). Overall, the unit of resource available to teach and support each student has, in some senses, been reduced. In addition, Longden (2000) uses comparative data to demonstrate that the UK spends less on higher education than other high income countries.

A small study by Boxall et al. (2002) found that the costs of widening participation are significant, and not spread evenly across the sector. There is no new evidence about the extent to which the increased widening participation premium has relieved the problem, but it is likely that institutions with high numbers of widening participation students have lower units of resource per student, rather than higher, as the evidence would suggest is required. Evidence about the benefits (or otherwise) of the widening participation premium is not apparent.

Funding mechanisms may also penalise students and institutions without traditional patterns of participation. Quinn et al. (2005) found that the majority of 67 young working-class students who had withdrawn from HE now wanted to re-enter. But if these students had not attempted their end-of-year assessment or otherwise remained out of the HE system for a considerable period they are deemed to have withdrawn. Quinn et al. suggest that this results in financial 'penalties' for both students and institutions. Quite how this penalty occurs is not made clear.

8. After initial higher education

Summary

There is overwhelming evidence that graduates, particularly women, receive a significant earnings premium when compared with non-graduates. Recent evidence suggests that returns for HE have fallen for the most recent cohorts, especially for women, which may be due to the rapid expansion in the number of female graduates, and declines being concentrated in those subjects in which female graduates predominate (i.e. Education, Arts, Medicine and related) and in the lowest quartile of the distribution of earnings.

Being a graduate still offers labour market advantages compared to non-graduate peers. However, graduates from lower socio-economic groups are disadvantaged compared to traditional graduates. Ethnic minorities can experience more difficulty securing employment after graduation than white graduates, and men in particular are more likely to be unemployed. Mature graduates experience greater disadvantages in the labour market than younger graduates. Women graduates earn less than men, and this difference is greater if they have a family and a career break. However, being a graduate is an effective way of redressing gender inequality in comparison to non-graduates.

Part-time students have different labour market expectations because they are usually in employment while studying. The limited evidence suggests that there are labour market gains as a result of studying part-time. Data is only available about full-time vocational sub-degree qualifiers, which suggests that half enter employment, and half continue in education, while unemployment is very low. Patterns however, vary by subject. Jobs entered tend to be at a lower level than first degree graduates entering the labour market, but when nurses are removed from analysis the pattern looks more similar.

Increases in participation in undergraduate HE have been accompanied by greater numbers of graduates entering postgraduate study, especially taught programmes. Differences in undergraduate participation are largely continued, but not worsened, in postgraduate participation.

A lifecourse approach to widening participation requires the review to consider the opportunities and barriers to progression after graduation from higher education and the impact that these may have on initial decisions regarding participation in HE.

8.1 Estimating labour market returns to HE

Widening participation research in Britain and elsewhere has largely neglected the possibility that the labour market may act as a barrier. This neglect reflects the overwhelming evidence, from the 1970s up to the present time, that graduates receive a significant earnings premium when compared with non-graduates, and the implicit assumption that these relatively high economic returns are available to all qualified

entrants to HE. With the development of more sophisticated analytical techniques and the availability of better datasets, researchers have recently been able to present more detailed analyses of the size and determinants of this premium. Putting together the results of recent UK research it is now possible to provide an initial examination of the extent to which the labour market provides economic incentives for non-traditional students to enter HE.

According to orthodox economic analysis there are two possible causes of low HE participation amongst particular groups which are unrelated to their innate ability to benefit from such participation. Firstly, there are various market failures that prevent or discourage these groups from qualifying for, applying to and/or entering HE. Most of this review has so far been concerned with examining the nature of such barriers. However, the alternative possibility which orthodox economic analysis raises is whether the labour market generates insufficient anticipated economic rewards from HE entrance for these groups. Anticipated economic rewards to HE study take the form of its normally positive impact on lifelong employment reflected in higher earnings, social status and other non-pecuniary benefits and lower incidence and duration of unemployment. The dominant approach to investigating these benefits has been through microeconomic studies which typically concentrate upon a very narrow measure of benefits, though social mobility research has explored the determinants of the occupational attainment of graduates.

In the microeconomic approach an earnings function is utilised to analyse (preferably) cohort data and estimate rates of return to graduates. The many limitations of such earnings function approaches are well known (Card 2001, Heckman et al. 2003) but nevertheless frequently neglected by researchers. However, the overall nature of the results generated for developed economies are claimed to be fairly robust to different model specifications and statistical approaches (Harmon et al. 2003). For the UK, Blundell et al. (2005) found evidence that the returns to education vary across individuals for the same educational qualifications, and that individuals select education on the basis of such heterogeneous returns. They conclude, however, that the overall returns to educational qualifications at each stage of the schooling process remain sizeable and significant.

Since the 1960s a large number of earnings function studies have found 'high' average rates of return to graduation in the UK: that is, the returns seem high when compared to alternative investment opportunities of comparable risk. Most recent studies (Chevalier and Walker 2001, Dearden et al. 2002, McIntosh 2004, Blundell et al. 2005) confirm these findings and suggest a higher rate for female graduates. Notwithstanding the methodological problems discussed in the following section, it seems clear from these and similar studies that on average UK entrants into HE face sufficient economic incentives. For traditional entrants the labour market acts as an attraction rather than a barrier. Extreme risk aversion, information asymmetries, low aspirations, cultural and social capital constraints and the other barriers examined earlier in this review may still prevent these high average rates of return providing sufficient incentives for certain groups of potential entrants. However, in this section of the review we are concerned with an alternative possibility – that certain groups of potential entrants may systematically receive smaller earnings premiums after graduation and hence receive lower rates of returns than these average rates. In such a situation these groups may face a lack of economic incentives to participate in HE and

to the extent this occurs in the UK the labour market could be a barrier to widening participation.

Some recent studies do indeed suggest different returns by entry qualifications, social class, degree class, subject area and HEI. For example, Johnes and McNabb (2004) found that students from poorer backgrounds are more likely than others to drop out of university: predominantly for non-academic reasons in the case of women. Smith and Naylor (2001) found that social class has a strong effect on degree performance and Smith et al. (2000) that students from poorer backgrounds who graduate have a lower probability of being employed in graduate occupations after graduation. Blasko et al. (2003), based on a relatively small sample four years after graduation, also found that male and female graduates from lower socio-economic backgrounds received lower salaries than graduates from more advantaged backgrounds and were less likely to be in 'graduate' jobs. In addition male, but not female, graduates from a working-class background were more likely to experience unemployment – as were black male graduates and male graduates of Bangladeshi, Indian and Pakistani origins. The same study found that older male graduates received lower salaries and were also disadvantaged in terms of the level of their post-graduation jobs. However, it was Asian women not men who earned less than their white graduate counterparts, and Asian graduates in general were more successful in terms of the level of their job irrespective of gender.

McGuinness (2003), for a Northern Ireland cohort, concluded that for given pre-entry qualifications, subject choice and degree classifications are more important determinants of rates of return than the 'quality' 'of the university attended. Naylor and Smith (2004) analysed HESA data for the entire population of 1998 leavers to provide more detailed analysis of degree performance. In pre-1992 universities they found large and significant negative ethnic origin effects for all but female Chinese students. For example, Indian students have an approximately 10% lower probability of obtaining a 'good' degree than apparently similar students of white ethnic origin. Naylor and Smith (2004) also found that some reported disabilities have significant negative effects on degree performance. Dyslexia is associated with a 6% lower probability for male students of obtaining a good degree. However, whilst all disabilities have negative coefficients, the low sample size prevented the researchers from drawing more detailed conclusions.

In combination these findings raise the possibility that some marginal entrants to HE may face rates of return insufficient to provide financial incentives for HE participation. This is largely due to their differences in completion rates. An additional and related concern is that the recent rapid expansion of HE in the UK has increased the inflow of graduates into the labour market at a faster rate than the creation of new graduate-level jobs, thereby lowering the earnings premiums of new graduates (the 'overeducation' phenomenon). If this impacts disproportionately on certain groups with low overall participation rates in HE then this may also represent a barrier to widening participation.

In the discussion below, we ignore any deviation of social rates of return from private ones, equity considerations and the possibility that perceived or anticipated returns from HE completion may systematically be less than the estimated returns amongst low participation groups. These are all interesting issues but we lack data to discuss

the first of these, the second lies outside the remit of this section and the third we have discussed previously. Here we focus on whether the labour market currently provides incentives for the marginal students to enter HE.

8.1.1 Data limitations and methodological issues

Even with reasonable quality datasets, the earnings function underlying research in this area is typically unable to explain the majority of the deviations between individuals' labour market earnings. There are a number of reasons for this, and Harmon et al. (2003), Heckman et al. (2003) and Blundell et al. (2005) provide general reviews of the limitations of research based upon earnings functions. First, jobs are heterogeneous in terms of other factors than earnings, and the presence of non-pecuniary returns to employment distorts the relationship between educational attainment and earnings. Secondly, labour market success also depends upon ability, luck and nepotism, together with what Bowles et al. (2001) call 'incentive-enhancing preferences' such as a sense of efficacy and self-direction. Whilst modern statistical techniques can begin to address some of the problems related to the endogenous nature of educational decision-making, how to separate out earning premiums entirely due to the successful completion of higher education remains problematic. Thirdly, measurement errors, missing data and omitted variable problems in most datasets not only reflect unmeasured job characteristics and personality traits but many other factors which affect an individual's ability and willingness to exploit the full economic potential of their educational qualifications (see Appendix A). To the extent that important missing variables are correlated with membership of low participation groups then we risk misinterpreting the results of any analysis.

Fourthly, cohort analyses of graduate premiums require the existence of a comparator group of qualified potential entrants who do not proceed into HE. As the overall participation rates in HE increase, this comparator group becomes smaller and more atypical in other characteristics. Fifthly, even the large datasets available to researchers in this area will have relatively small numbers of individuals in many of the low-participation groups. This reduces the likelihood of robust results emerging. Sixthly, much of the data available on the labour market experience of cohorts of graduates covers only their initial labour market experiences. If we are interested in issues of whether the *recent* expansion of HE in the UK has increased the incidence of overeducation this is the only available data which is relevant. This raises the question of the extent to which the early labour market experience of graduates is a good predictor of their long-term rates of return. Finally, we have few proxies for the actual quality of the higher education experience of graduates, though we do sometimes have indirect indications for the perception of that quality.

We then face additional methodological problems in conducting research in this area. We have already mentioned the endogenous problem above – the likelihood that individuals of higher unobserved ability or with higher unobserved payoffs to higher education are more likely to participate. We also referred to the problems in isolating the effects of higher education, since educational decisions are not always incremental and we know, for instance, that graduates are more likely to undergo training once they join the labour market (Arulampalam et al. 2003). Many studies rely upon cross-sectional survey data such as the Labour Force Survey. However, the rapidly

changing nature of both modern labour markets and the higher education system reduce the comparability of the experience of different cohorts.

Bearing in mind these severe methodological and data-related problems, we now summarise the main findings of aggregate studies of the labour market experiences of graduates in the UK.

8.1.2 Overeducation and recent trends in returns to HE

Overeducation in the UK context concerns the fear that the rapid expansion of HE, particularly in the 1990s, created an excess supply of graduates in the labour market and hence depressed rates of returns to HE. One proposed adjustment mechanism to this excess supply is that as a wider spectrum of the ability range is brought into HE, employers place graduates into jobs which were previously filled by non-graduates that yield lower levels of productivity and income than traditional graduate jobs (Elias and Purcell 2004).

Whilst Walker and Zhu (2003) and Elias and Purcell (2003) initially suggested that the rewards for graduation in the UK had remained fairly constant over time, Elias and Purcell (2004) reappraised their earlier results and, together with Chevalier et al. (2004) concluded that returns have fallen for the most recent cohorts. Whilst these two studies found no evidence that this downturn was concentrated at the lower end of the earnings distribution, O'Leary and Sloane (2005) used the Labour Force Survey (1993-2003) to find a significant decline in the mark-up for females. This latter finding is supported by Bratti et al. (2005) who compare the returns of the 1958 and 1970 cohorts from the National Child Development Study. They find that whilst the return to a university degree was similar for males in the two cohorts, females in the 1970 cohort though still receiving wage returns higher than male graduates, had returns that were only around half those of females in the 1958 cohort. Such a reduction is not too surprising given the particularly rapid expansion of the number of female graduates between 1990 and 2000. However, there appears to be a large variation across subjects, with declines being concentrated in those subjects in which female graduates predominate (Education, Arts and Medicine and Related) and in the lowest quartile of the distribution of earnings. However, this type of study is not capable of distinguishing between reductions in the wage premium offered by graduate level jobs or a changing proportion of graduates attaining such jobs.

An alternative approach is to attempt to measure directly the proportion of graduates who are overeducated for their current jobs. Early research on overeducation in the UK, examining graduates up to 1990 (Battu et al. 2000, Dolton and Vignoles 2000, and Chevalier 2003), found that around a third of graduates had 'too much' education for their first job, though researchers differ as to how best to define the latter. Overeducated graduates were not overwhelmingly recent entrants to the labour market and they appeared to incur a significant wage penalty (between 5% and 26%) compared with those graduates in better matches. These findings raised concerns as to whether a sizeable group of UK graduates was unable to acquire 'graduate' skills at university or alternatively whether there was an inadequate supply of 'graduate' jobs. One interpretation of these initial findings was that less academic tertiary education qualifications may be more cost-effective (Keep and Mayhew 2004).

More recently, McGuinness and Doyle (2005) found that whilst overeducation is heavily concentrated within the lower ability segment of the male and female graduate wage distribution, it was an oversimplification to characterise overeducation as affecting only the lower ability levels of graduates. Elias and Purcell (2004) in their review broadly conclude that fears of growing overeducation are misplaced. Concentrating upon the experience of graduates who entered the labour market in the mid-1990s they find that although graduates are assimilated into the labour market at different rates dependent upon their subject, attainment level and other factors, there was no evidence that this process was slowing down. They also find that the graduate earnings premium for the class of 1995 over the first six/seven years after graduation was comparable to the 1980 cohort (i.e. a cohort before the rapid HE expansion of the early 1990s). For graduates at a later stage of their careers, however, there is some evidence that there may have been a decline in their premiums from historically high levels. In interpreting these findings they also find evidence that the nature of jobs available to graduates has been adjusted to reflect the increased supply of highly-qualified entrants. Overall, they argue, the growth of 'modern graduate' (e.g. management, IT and creative vocational) and 'new graduate' jobs (e.g. marketing, management accounting, physiotherapy, welfare, housing and probation officers) together with the development of 'niche graduate' occupations (e.g. leisure, sports and hotel management, retail management and nursing) has been sufficient to absorb the increased supply of graduates without a collapse in the graduate earnings premium.

It is still too early to reach firm conclusions about the labour market consequences of the recent rapid expansion of HE in the UK in the 1990s. At best we only have data on the initial employment experiences of these graduate cohorts. However, as yet, there is little evidence of a sizeable decline in the earnings premium of young graduates, or of a significant slowing down of the matching process or a sizeable rise in graduate 'overeducation'. Interestingly, a similar conclusion holds for Portugal which has also experienced a rapid expansion of higher education (Cardoso, 2004). Notwithstanding our tentative conclusion, it remains conceivable that particular sub-groups of graduates may suffer disproportionately from HE expansion, and as yet we have little evidence available at such a disaggregated level.

8.1.3 The 'marginal learner'

Successfully widening participation means attracting marginal learners from low participation groups to enter HE. Hence the need to analyse the economic incentives faced by variously defined groups of 'marginal learners' rather than focus solely on the average returns to those graduating from previous groups of, largely, non-marginal learners. Dearden et al. (2004b) used the 1970 British Cohort Study to identify the wage returns to staying on in post-compulsory schooling and completing HE for variously defined marginal learners when they were aged 29-30 in 1999-2000. The acknowledged limitations caused by low sample sizes, possible selectivity of the non-responding groups and omitted variable bias, together suggest that this innovative study should be viewed as an exploratory analysis.

They found that there are substantial returns both to staying on and completing HE for all sub-groups (by socio-economic background, family income and ability) of the population, with more variation amongst males and higher returns for females. For staying on after compulsory schooling the study found, subject to data limitations, that

individuals from poorer families who drop out would have enjoyed substantial returns from staying on (around 13% for men and 17% for women). As to the attainment of any form of HE conditional on having achieved at least Level 2 qualifications, returns were generally higher than for staying on after compulsory schooling. Overall, those with intermediate probabilities of achieving HE experience significantly higher returns from HE than those with either higher or lower probabilities. Thus, as Dearden et al. (2004b) point out, if marginal learners are defined as those on the bubble between going to HE and not, they generally face significant financial incentives to enter HE. For men the returns to HE are substantially higher for the disadvantaged groups (low social class, low-income family and low-ability) than advantaged groups. There was some indication of efficient sorting in that among low-income males returns were higher for those who did achieve HE than the estimates for those who stopped at Level 2 or 3. In sharp contrast to men, women were found to have very similar returns to HE across ability, income and social class groups.

It has to be borne in mind that in this sample the marginal learners were making their HE participation decisions in 1989. As we have noted above, the rapid expansion of HE since then appears to have altered the average returns to HE study and it is likely that the profile of the marginal learner has also changed. In addition, by focusing on average returns for specific subgroups the degree of risk and uncertainty attached to those education returns are neglected, which may be an important factor for less well-off families. Finally, since men are more likely to be working full-time in their early 30s than women, we face particular problems in making gender comparisons.

8.2 Employability

There is little research into the contribution of work experience to learning in HE and to employability in the graduate labour market, for graduates from disadvantaged backgrounds. The research that is available usually makes use of first destinations data from HESA of graduates six months after completing their programmes. This suggests that previous work experience is useful in relation to graduate employment.

Blackwell et al. (2001) do not specifically focus on students from under-represented groups, but they provide data about the potential impact of work experience on employment in the graduate labour market. Their findings suggest that sandwich courses have a positive impact on labour market employment: graduates from sandwich courses have higher post-graduation employment rates (69 %) than students on equivalent non-sandwich courses (55%). In particular, graduates of thick-sandwich courses usually outperform those on equivalent thin-sandwich courses, but there are discipline differences. Mason et al. (2003) reached similar conclusions in their analysis of first destinations data for June 2000 graduates. After controlling for gender, age, intellectual ability (as assessed by A-level scores), degree class, degree subject and a range of other potential influences, the probability of graduates being employed six months after graduation (as against being unemployed or economically inactive) was found to be positively associated with them having participated in a sandwich placement during their studies. Sandwich participation was also positively associated with employment in graduate-level occupations, either in 'traditional graduate' or 'graduate track' occupations (rather than in non-graduate occupations). The same analysis found that employer involvement in course design and delivery

was positively associated with the occupation-based measure of the quality of initial employment found by graduates. However, there was no evidence of a significant independent effect of the efforts devoted by university departments to the teaching, learning and assessment of employability skills. HEFCE (2002) found that study-related work experience has a positive impact in the labour market. These findings support the work of Blasko et al. (2003) who found that extra-curricular activities have a positive impact on most disadvantaged student groups in the labour market (with the exception of mature students).

8.3 Transition to the labour market

The focus of this section is on barriers and challenges to progressing into the labour market from HE faced by students from under-represented groups. A total of 44 research studies examining progression from higher education to employment were identified in the literature review.

8.3.1 Participation of graduates from non-traditional groups in the labour market

Analysis reviewed earlier in this section has suggested that there are economic benefits for students from under-represented groups entering higher education. However, there is some evidence that the labour market rewards these graduates less than their counterparts from traditional backgrounds, as a result of both their personal characteristics and educational choices (Pitcher and Purcell 1998). Research studies suggest that barriers to equivalent success in the labour market are both direct and indirect (Blasko et al. 2003). Direct effects refer to those where students from certain backgrounds are disadvantaged in the labour market compared to contemporaries with similar educational backgrounds and experiences. Indirect effects are those which can be traced back to earlier educational disadvantage, such as poor schooling and/or institution attended, which in turn influence a graduate's experience in the labour market.

'Indirect' barriers in the labour market

Indirect barriers to success in the labour market appear to be significant for students from educationally disadvantaged backgrounds. Employers systematically favour graduates with certain educational characteristics: good A-levels, high status HEIs, certain degree subjects (Pitcher and Purcell 1998) and a good degree classification, (Purcell and Hogarth 1999). Brown and Hesketh (2003) illustrate this with an example. One organisation received 14,000 applications for 428 vacancies. Graduates from Oxford University had a one in eight chance of success, while applicants from new universities had a one in 235 chance (although the researchers had not controlled for other differences). Chevalier and Conlon (2003) use cohorts of graduates from 1985, 1990 and 1995 to explore the impact of institutional type on returns in the labour market. They did control for personal characteristics, and found some evidence that more prestigious institutions, especially Russell Group HEIs, provide higher financial returns to their graduates, compared to other institutions, particularly post-1992 institutions. Whilst their findings are far from robust, confirmation of such a premium would reinforce social and cultural divisions in the labour market, as the Russell Group and other pre-1992 institutions attract fewer students from non-traditional and educationally disadvantaged backgrounds and the majority of working-

class students attend post-1992 institutions (Keep and Mayhew 2004, Leathwood 2002).

'Direct' barriers in the labour market

The reviewed research suggests that graduates from non-traditional backgrounds do less well in the labour market, even when other variables such as entry qualifications, institution attended, subject studied and degree classification are controlled for (Hogarth et al. 1997). Men and women from lower socio-economic groups tend to receive lower salaries than graduates from more advantaged social backgrounds, and are less likely to feel that they are in graduate positions (Blasko et al. 2003). Working-class male graduates in particular experience more disadvantage in the labour market – such as periods of unemployment – and are less likely to be in managerial or professional posts than their middle class counterparts. This however is not surprising, as the recruitment process is often designed to bring out the personal qualities of graduates. As Brown and Hesketh (2003) concluded 'the social, cultural and economic backgrounds of candidates have been increasingly exposed. It is very difficult for those from disadvantaged backgrounds to demonstrate the "personal" capital required to gain elite employment'. Overall, Pitcher and Purcell (1998) report that whilst graduates were largely flexible in their approach to the labour market, employers tended to use rigid recruitment practices.

8.3.2 Graduates from lower socio-economic groups

Research suggests that graduates from lower socio-economic groups are frequently disadvantaged in the labour market compared to middle-class graduates (Purcell and Hogarth 1999, Smith et al. 2000). For example, Brown and Hesketh (2003) find that widening access to higher education has done little to boost the chances of working-class graduates joining the professional elite. In other words these graduates are improving their position in the labour market, but they are not securing the top jobs – with the highest salaries and/or with the most prestigious employers.

There appear to be both direct and indirect barriers to success in the labour market for graduates from lower socio-economic groups. For example, Caspi et al. (1998) found that personal and family characteristics begin to shape labour-market outcomes years before people enter the labour market, and they remain significant even when educational duration and qualifications are taken into account. This needs to be contrasted with the findings of Bond and Saunders (1999) who conclude that poorer returns from the labour market are largely to do with individual ability and motivation. They find that class background and parental support are significant, but much weaker than these other factors. Purcell et al. (2002) find in their qualitative research that many employers do not believe that social class is a significant variable in graduate recruitment, however they conclude that the discrimination is implicit, as competency-based recruitment favours those with the confidence that middle class 'cultural capital' endows. For example, they found that 'most of the assessment centres that we examined included structured events that allowed self-confident and articulate candidates to shine' (p.15).

Hills' research in one HEI suggests that non-traditional students either do not know where to look for information to assist their job search, or they were not using it (Hills

2003). She also presents some evidence that suggests that working-class students can disqualify themselves from particular professions as they believe they will not fit in or would not be recruited. This relates to self-confidence and a caricature about some employment fields. Personal and family characteristics also relate to indirect negative effects in the labour market, primarily linked to educational choices. For example some of the reasons why graduates from lower socio-economic groups do less well in the labour market are related to the institutions they attend, the subjects they study, the class of degree they obtain and their HE entry qualifications (Blasko et al. 2003). This may be compounded by the fact that students who are the first in their family to enter higher education are less likely to relocate from their domicile region to attend an HEI (Belfield and Morris, 1999), restricting their choice of institutions. Furthermore, they are less willing to relocate to find graduate employment, which is associated with higher status employment (Dolton and Silles 2001). Blasko et al. (2003) found that students from lower socio-economic groups are less likely to participate in 'extra-curricular activities' that contribute to CV-building and better opportunities in the labour market.

The school that pupils attend influences both the qualifications they achieve and the university they attend. These factors both contribute to their experience in the graduate labour market. Naylor and Smith (2004) calculate that, on average, graduates who attended an independent school receive an earnings premium of around 3% over and above the earnings of an equivalent graduate who attended a local education authority school. This finding was not confirmed however by the work of Smith et al. (2000) who found no effect on earnings of having previously studied at an independent school.

8.3.3 Ethnic minority graduates

In general, ethnic minority graduates do less well in the labour market, at least initially, than white graduates (Bailey 2003, Shiner and Modood 2002, Hogarth et al. 1997). In particular, ethnic minority students experience more difficulty securing a job after graduation and are more likely to be unemployed (Connor et al. 2004, Blasko et al. 2003). Rates of unemployment however vary between different ethnic minority groups and are mediated by gender. Studies generally find that ethnic minority men are more likely to be unemployed than ethnic minority women, but it is not clear which groups of males are most likely to be unemployed. According to Blasko et al. (2003) it is most likely to be black minority groups, Indian, Pakistani and Bangladeshi men, while Connor et al. (2004) identify Pakistani and Chinese men to be particularly disadvantaged. The situation relating to Chinese men is ambiguous. Connor et al. use 2001-02 HESA data to demonstrate that Chinese graduates are more likely to be unemployed, while Blasko et al. also use HESA's data and argue that Chinese graduates are less likely to be unemployed, but they do not supply the data in the report or appendices to verify this claim.

Once ethnic minorities have secured employment, the evidence indicates that they fare well. Blasko et al. (2003) found that minority graduates are not less likely than other graduates to be in a graduate job and Connor et al. (2004) tentatively conclude from the evidence available that they are on average in 'better' jobs than white graduates. This positive conclusion is tempered by evidence from Battu and Sloane (2002), presented in Bailey (2003), which suggests that ethnic minority students are

more over-educated for their employment than whites, where overeducation is defined as being 'employed in jobs for which their current qualifications are not required'. Bailey's survey has sample sizes that are too small to verify or question Battu and Sloane's claim.

Ethnic minorities, particularly black graduates as opposed to Indian and Chinese graduates, are under-represented in the graduate intakes of large firms (Connor et al. 2004). This could be largely a consequence of discriminatory recruitment procedures which are often causing indirect discrimination, for example recruiting on the basis of A-level score, using competency frameworks, tests or assessments that are biased against different cultural and/or education backgrounds and interview bias. Large and prestigious employers tend to focus on particular institutions, which are usually pre-1992 institutions with high average A-level entry scores and a strong academic reputation (Connor et al. 2004). These institutions have smaller numbers of ethnic minority students, with the exception of Chinese students (Shiner and Modood 2002). Indirect discrimination is reinforced by the low expectations about the labour market that some minority students hold, and/or low expectations of HE staff who direct them to less challenging careers (Hills 2003). Both Connor et al. (2004) and Hills (2003) identify a lack of ethnic minority role models, especially at middle and senior management levels as contributing to low expectations by students and their advisors. But the efficacy of providing such models is far from established.

Leslie and Lindley (2001) find that language ability does contribute to non-white disadvantage in the labour market experience, but after language effects are removed non-white males still have higher rates of unemployment and lower earnings. Hills (2003) identifies dialect and discrimination as potentially influential. In her study, HE staff report that some ethnic minority students speak a fusion language, not just with friends, but in the university too, and they are likely to use this in interviews and be less successful than their more traditional peers in securing high status employment.

8.3.4 Mature graduates

There is some evidence indicating that mature graduates have more difficulty in making a successful transition into the labour market than younger graduates (Conlon 2001). Smith et al. (2000) find that men aged over 33 are six percentage points more likely to be unemployed or inactive than men aged less than 24 at graduation, while women between 24 and 33 are at least two percentage points more likely to be unemployed or inactive than their younger peers. Entering HE after the age of 24 has negative labour market effects for male and female graduates, including increased risk of unemployment, poor career prospects and less likelihood of achieving a graduate level job (Blasko et al. 2003). Egerton and Parry (2001) found that the rates of financial return for mature graduate women were 5-6% and for mature graduate men it was only about 1% compared with not entering higher education. Egerton and Parry (2001) estimate that with the additional costs of higher education (tuition fees and loans rather than grants to cover living costs), new mature male graduates will make a sizeable overall loss from participating in HE. Purcell et al. (2002) found that the number of new graduates over the age of 30 who were recent recruits to traditional 'high flyer' jobs was very small – such recruits were more frequently found in 'difficult to fill' vacancies.

There is limited evidence about why mature graduates appear to experience disadvantage in the labour market. In one London institution some employers reported that they preferred younger graduates, particularly in some fields such as law (Hills 2003). It is also likely that mature graduates are less able to relocate to find higher status employment, which can have a negative impact on employment opportunities (Dolton and Silles 2001). In Purcell et al's (2002) study it was widely argued by employers that mature students de-select themselves from 'fast-track' programmes on the grounds that they are more likely to have dependants, less likely to be geographically mobile and less willing to undertake the kinds of activities (frequent travel, long and unpredictable working hours and/or moves within the UK or abroad) expected as part of such programmes. This raises the question of whether such requirements are essentially core aspects of these high-flyer vacancies in organisations that build them into graduate training programmes.

8.3.5 Gender issues

Women earn less than men in the labour market (Hogarth et al. 1997, Metcalf 1997 cited in Adnett and Coates 2000), and on average female graduates earn less than males. However, as noted earlier in this section, the returns from higher education tend to be higher for women than men (i.e. in comparison to their non-graduate counterparts). For example, according to Sloane and O'Leary (2004) a degree would increase labour market returns by 20% for a man (relative to a similar man with two or more A-levels), while the comparable figure for a woman is 35%. There is a significant difference between women with children and those without, with the latter earning more than the former (Waldfoegel 1998).

The position of female graduates largely reflects the labour market in general. Intermittent participation in the labour market (as a result of family formation) is heavily penalised and affects women more (Wright and Ermisch 1991). Such family status issues appears to account for approximately half of the gender wage gap, with most of the remainder being associated with the shorter experience of the average female worker and their lower returns for that experience. However, graduate females are more likely than non-graduates to delay having a family and less likely to leave full-time employment when they do have children. Shaw et al. (1998) identify enhanced maternity benefits and job retention schemes such as career break plans, child care provision and flexible working hours as effective strategies to bring graduate mothers back to the full-time labour market more quickly.

8.2.6 Disabled graduates

There is surprisingly little research about disabled graduates and the labour market. Hogarth et al. (1997) found that disabled graduates have lower earnings than non-disabled graduates. Research by the Disabilities Task Group of the Association of Graduate Careers Advisory Services specifically looked the destinations of 2003 graduates with disabilities (self-declared whilst in HE) in comparison to non-disabled peers by analysing HESA first destinations data for full-time graduates (Croucher et al. 2005). Unlike other research, this study examined the experiences of disabled graduates from specific groups – dyslexia and unseen disabilities, blind and partially sighted, deaf and hearing impaired, wheel chair users and mobility difficulties and mental health issues. This study found that graduates with disabilities do slightly

worse in the labour market compared to their non-disabled peers, but they are more likely to progress to further studies. The difference however is less pronounced for unseen disabilities. There is no research that we have found for this report that explores why graduates with disabilities experience difficulties in the labour market.

8.3.7 Part-time graduates

Part-time students have different labour market expectations, as the majority are in employment while they are studying (Brennan et al. 2000). In a survey of 2,000 part-time students and graduates, 55% of graduates and 37% of current students felt that their part-time programmes had reaped them labour market gains. There were significant discipline area differences, with technology students/graduates gaining the most and social science students/graduates the least. But Brennan et al. note it is important to recognise the different reasons for undertaking study – it is not necessarily predominantly for career advancement. In relation to this there appears to be a gender difference, as men were more likely to feel that they had benefited economically than women, but women are more likely to undertake learning for other reasons. Also, younger students (under 40) were more likely to study for career related reasons, while older students had other motivations. Ethnic minority students were more likely to study for career-related reasons, but reported slightly lower than average benefits.

8.3.8 Vocational sub-degree qualifiers

Little (2003) researched the experiences of vocational sub-degree (e.g. non-honours degree programmes) students in England. Drawing on HESA data they provided employment destination information for full-time qualifiers from HE institutions only. This is only a small proportion of the total number of students entering the labour market with these qualifications as many students study in the FE sector and with private sector providers and much of this studying is undertaken on a part-time basis. HESA first destinations data for 2000-01 shows there was a total of just over 20,000 full-time qualifiers with sub-degree qualifications with a known destination (UK domiciled only). Around half of the sub-degree output went into employment while a third continued in education (mostly transferring to degree study). Unemployment is very low, indicating a generally high level of demand. However, McIntosh (2004) found that though returns to men and women completing HNC/HND qualifications were positive, they were around half those earned by those completing first degrees. Interestingly, an HNC/HND qualification generated no earnings benefit for individuals with two or more A-levels, suggesting that the former are substitutes, rather than complements. Dearden et al. (2002) found that the wage premiums for men with vocational qualifications was highest for HNC/HNDs and that for low ability students vocational qualifications had a higher wage premiums than academic qualifications. Gasteen et al. (2003) generated broadly similar findings in their Scottish study: whilst graduates and diplomats had a similar probability of finding work, graduates were more likely to access higher paying jobs. The destination pattern of sub-degree students varies considerably by subject, and in some (business studies, computer science and engineering) the main exit route is to a first degree. The occupational pattern of those entering employment from full-time study differs between degree and sub-degree qualifiers, in that those with sub-degrees tend to enter lower level jobs than first degree graduates. However, the effect of the large number

of nursing students in the sub-degree total tends to distort the figures and when removed, the occupational pattern of degree and sub-degree output looks more similar.

8.3.9 Interventions to support non-traditional students in the labour market

Connor et al. (2004) found that there is a lack of evaluative evidence about the impact of interventions that support students from under-represented groups to gain greater parity in the graduate labour market. Interventions in the labour market can be targeted at changing supply (students) or changing demand (employers) to create greater parity between traditional and non-traditional graduates. The majority of approaches reported in the literature are geared towards students' activities, and do not address discrimination in the labour market.

Participation in voluntary work and extra-curricular activities have been identified as having a positive impact on gaining graduate employment. Brown and Hesketh found that participation in voluntary work or extensive extra-curricular activities at university were deliberately undertaken by some students to add value to the CV and send a message to potential employers about their drive, self-reliance and 'get up and go'. Blasko et al. (2003) found that involvement in extra-curricular activities has a positive impact for students from lower socio-economic groups and ethnic minorities, although not for mature students. They also found that students from lower socio-economic groups are less likely to be involved in these activities and so are further disadvantaged in the graduate labour market. An overseas study experience and/or a substantial period of work experience, especially for students in non-vocational disciplines, has a positive impact, especially for graduates from lower socio-economic groups, although again not for older graduates.

Conversely, engagement in part-time employment has a small negative impact on success in the labour market, especially for students from lower socio-economic groups. Purcell et al. (2002) suggest that HEIs and employers need to develop work experience opportunities within undergraduate degree programmes – which offer students relevant work experience and enable them to develop demonstrable skills and competencies, and assist employers to reach a more diverse potential labour force.

Blasko et al. (2003) identify early job search and employing a range of strategies as having a positive impact on progression into the labour market. More specifically Brown and Hesketh (2003) identified a range of job search strategies adopted by successful graduate job searchers. One approach is the use of available careers information and services, and social contacts to decode the winning formula.

In contrast, Purcell et al. (2002) find that employers perceive many students to be ill-prepared for careers fairs and the selection procedure. Hills (2003) found that when careers services are used it tends to be rather late in a student's course – just prior to graduation. The role of careers staff is important as many teaching staff are not knowledgeable about the labour market in their field. The employment outcomes of graduates were positively influenced by early job search, work experience and involvement in extra-curricular activities. Blasko et al. (2003) found that both working-class and mature students were making less use of these and other factors associated with enhanced employment outcomes. Though, as these researchers point

out, it is not clear whether these relationships are causal and concerns about the endogenous nature of these factors remain since attitudes and aspirations may affect the effectiveness of job search methods. They also found that it was the relatively advantaged students who were more likely to take advantage of HEIs' initiatives to enhance employability, suggesting that poorly targeted initiatives could have dysfunctional effects on the extent of employment inequalities.

Purcell et al. (2002) undertook a study for HEFCE to explore good practice amongst employers from all sectors who recruit from a wider diversity of graduates. The study involved a search for exemplars of practice and exploration of what this practice entailed. Good practice included positively encouraging applications from under-represented groups and targeting a wide range of HEIs, rather than focusing exclusively on pre-1992 universities. This research identified four types of reasons why employers embrace a diversity agenda: external drivers, the business case, commitment to equal opportunities and commitment to diversity. The reasons relating to the business case included the need to recruit staff with the required skills to understand and reflect the organisation's current or targeted customers/client base, the need for cultural understanding of overseas markets, a broader mix of skills including customer service, team working and people management, and the need to extend the business into new markets. It is particularly striking that employers are more likely to engage in recruitment and employee diversity if they are unable to secure the staff they need through traditional graduate recruitment routes and strategies. Where employers have modified their graduate training programmes and the requirement for geographical mobility they have generally attracted larger numbers of mature and other 'non-standard' graduates.

The use of assessment centres eliminates the initial screening of applicants on the basis of qualifications or institution attended but, as noted above, they tend to favour middle-class applicants. Purcell et al. (2002) found that whilst most employers did not take active steps to ameliorate the disadvantages of social class – they claimed it did not influence their decisions – the research study found evidence of indirect discrimination. There are more examples of positive action to recruit ethnic minority graduates, including pre-entry and entry schemes, which offer training to develop confidence and social and interpersonal skills to enable them to develop their abilities more effectively. Purcell et al. (2002, p.16) conclude from their research that the best practice graduate recruiters share some or all of the following characteristics:

- They understand that recruitment is intertwined with marketing – in other words they have a business case for diversity and used non-traditional approaches to reach students from different institutions, backgrounds and ages.
- They are very clear about the skills and competencies they require, and therefore avoid requirements that indirectly exclude some graduates (e.g. flexibility of working hours and/or place).
- They develop effective networks with professional associations and HEIs to help ensure they reach the type of graduate they need, and that they are encouraged and supported to apply.
- They emphasise the career development and training, as well as immediate job opportunities, but manage expectations.
- They offer flexible work patterns.

- They align practice with policy and manage human resources strategically, even when aspects of the recruitment process are outsourced. This involved staff training to help ensure there is no bias in the recruitment process, and ensuring commitment at all levels of the organisation, e.g. via a ‘senior champion’.

8.4 Access to postgraduate study

Increases in participation in undergraduate HE have been accompanied by greater numbers of graduates entering postgraduate study to pursue their academic or career aspirations. In particular there has been a dramatic increase in the numbers of students studying at masters level (Hoad 2001). A study by HEFCE (2005) found that around a fifth of young entrants who qualify with a first degree will also study at postgraduate level, giving an estimated young postgraduate participation rate of 4%. The rise in this participation rate may reflect, in part, a need for a clearer signal to employers as HE participation rates have increased. As Keep and Mayhew (2004 p.309) comment: ‘Those from higher socio-economic groups have ways of fighting back, through acquiring additional human capital (for instance, via masters degrees)’. Sloane and O’Leary (2004) estimate that a higher degree provides an hourly earning boost of 114% for a man (relative to a similar man with no qualifications), while the comparable figure for a woman is 132%. Smith et al. (2000) found that a graduate’s class of degree, degree subject, prior qualifications and social class not only affected their success in the labour market, but also influenced their probability of undertaking further study. More recently, HEFCE (2005) found that for first degree qualifiers the participation rate for most types of postgraduate study varied little according to the background of the entrant. However, qualifiers from disadvantaged areas were nearly twice as likely to progress to postgraduate teaching courses. Overall, given the disproportionate number of those from advantaged backgrounds amongst degree qualifiers, the young participation rate of those from disadvantaged areas is 1.4% compared with 6.6% for advantaged areas. This is a similar degree of inequality to that found for young undergraduate participation.

8.4.1 Barriers to widening participation in postgraduate study

Potential barriers to accessing postgraduate study were identified by the National Postgraduate Committee (NPC) (Hoad 2001), these include:

- No access to financial support.
- More likely to have childcare needs.
- Inappropriate or inflexible timetables.
- Difficult access to facilities outside of undergraduate teaching times.
- Pressure from employers.
- Age-related problems.
- Perception that postgraduate study ‘is on for a particular type of “academic” person’.

The NPC suggests that the following barriers to completion exist:

- Consequences of issues identified above.

- Poor supervision.
- Lack of motivation.
- Isolation.
- Absence of a clear programme of study.
- Financial hardship.

8.4.2 Financial issues

Finance is a recurring theme identified in the UK as both a barrier to accessing postgraduate education and to successful completion. Fees for taught postgraduate courses are typically triple current undergraduate levels and there are very few studentships: 'a 2:2 and rich parents leads to postgraduate study much more readily than a first and a modest background' (Wakeling 2003). The NPC has highlighted the fact that the Higher Education White Paper 2004 does not address the needs of taught postgraduates. In particular, postgraduate students not only have to pay higher fees than for undergraduate education, but they are not eligible for any financial support on the basis of income. There were also concerns about the lack of comparability between a student loan and a career development loan (before its withdrawal), the former having a (subsidised) lower rate of interest and more favourable repayment terms.

In Australia an analysis in 1997 of 1993 and 1995 enrolment data in postgraduate courses (taught programmes as opposed to research) found that the introduction of the Higher Education Contribution Scheme (HECS, incorporating fees for postgraduate courses) had a negative impact on equity groups access to postgraduate study. A further study was undertaken in 1998 to extend this work to examine the evidence in Australia of the impact of the introduction of tuition fees on enrolments in taught postgraduate programmes (Anderson et al. 1998). The study involved a statistical analysis of students enrolled in taught programmes in 1993, 1995, 1996 and 1997 by target group. By definition this analysis excluded the students that may be worst affected by financial barriers to participation in postgraduate courses. But this shortcoming was ameliorated by the inclusion of questionnaires and interviews with final year undergraduates and graduates of three to ten years, and interviews with staff. These studies found that female students from lower socio-economic groups and students from rural families were significantly deterred by financial barriers. Students from non-English speaking backgrounds were not deterred by the costs any more than any other group, and had proportionately a slightly higher rate of enrolment than in undergraduate HE. Similarly, students of indigenous backgrounds enrolled in taught postgraduate programmes at a rate equivalent to their participation in undergraduate education. There was insufficient data about disabled students to reach any firm conclusions. The studies found that the financial barriers to participation in postgraduate study are the direct cost of study and a reluctance to add further debt to that accumulated through undergraduate study.

8.4.3 Postgraduate participation by specific target groups

Women

Although women are over-represented in undergraduate education they participate less than men at postgraduate level, especially in research degrees. HESA data for the UK shows that there is approximately a 2:1 male/female gender balance in full-time

postgraduate research which rises to 4:1 for some ethnic groups. This difference may be because women tend to prefer taught courses and there is less financial support available for these courses. Second, there may be discrimination in favour of men for the limited funding that is available for all types of postgraduate programmes. Australian research found that employers are more likely to support men than women to undertake a postgraduate course. Interview data (Anderson et al. 1998) suggests this is because employers are concerned about women's loyalty to their career as opposed to family commitments. Women however appear to gain relatively more than men by participating in postgraduate study. In the UK, labour market returns to men from a masters degree or a PhD degree have been estimated to be 29% and 31% compared to a comparable man with two or more A-levels. For women the returns were even greater: 54% for a masters degree and 60% for a PhD (Sloane and O'Leary 2004).

Social background

Wakeling (2003) has researched the link between social class and progression to postgraduate study on completion of a first degree, and finds that 'centrally collected data are patchy, but where available suggest that the undergraduate pattern of class inequality continues at postgraduate level'. This pattern is further reinforced, as 'among those with first-class honours the disparity is stronger, suggesting that the cause of inequality cannot be attributed to differential achievement'. In addition, graduates from pre-1992 universities are more likely to study for a PhD regardless of social class. In Australia if participation in postgraduate education reflected the composition of the population, 25% of students would be from lower socio-economic groups. But, in reality the figure is around 10% (10.4% in 1997). Education is the most popular subject area (approximately 15%) while law has the lowest proportion (6%). Finance has been proved to be a barrier to access in Australia (Anderson et al. 1998), and is likely to also be in England, where there is even less financial support than in Australia. What is not clear is what other barriers exist and how these interact with financial issues.

Disability

There is limited data about the participation and experience of postgraduate students with disabilities. Croucher et al. (2005) found that graduates with disabilities were slightly more likely to progress to further study than non-disabled peers. Anderson (1995) interviewed 28 postgraduate students studying taught programmes and for research degrees in Australia. She found significant differences between the barriers faced by men and women with disabilities. In particular, men were more encouraged to study at postgraduate level than women. Women faced additional problems such as divisions between domestic labour and study, finding uninterrupted time and space to study, lack of support from rehabilitation providers, compensation boards and social security for women returning to study and perceptions of unusual treatment by academics because of their disability. Anderson et al. (1998) note that some of these barriers will be faced by all women, but they are likely to be more acute for some disabled women.

Ethnic minorities

Connor et al. (2004) find that there is a greater tendency for minority ethnic degree graduates to enter postgraduate education than white graduates. This trend is particularly strong amongst Chinese and most Asian groups, as opposed to black

graduates. Black Caribbean and black other graduates are more likely to pursue vocational routes through postgraduate study, while other minority groups are likely to pursue academic study.

8.4.4 Lack of awareness about widening participation at postgraduate level

There appears to be a significant lack of awareness about widening participation in postgraduate study. The NPC is concerned that widening participation is only related to undergraduate education:

‘We propose that HEFCE ensure that the principle of widening participation extends to all students. The continuation of these principles into the postgraduate arena and the concurrent development of realistic objectives for widening participation at this level of study are important to provide a balanced approach’ (Hoad 2001).

‘It is this lack of awareness which leaves the apparently poor access to postgraduate education by students from under-represented groups unabated. However, a caution must be sounded – which is that as far as it is possible to tell, progression to postgraduate study is, in general, no more patterned than at undergraduate level’ (Wakeling 2005).

8.5 Conclusions

Notwithstanding the limitations of the research summarised above, it is tempting to conclude from the results of microeconomic studies of earnings functions that the labour market is not currently a significant barrier to widening HE participation. There appear to be significant economic rewards to marginal entrants to HE suggesting that there are potentially net social benefits from dismantling the barriers preventing the exploitation of these gains. However, the nature of the data analysed in the studies above means that the total number of observations available for many of the narrowly defined under-represented groups in HE are too few to yield reliable comparisons. These sample size limitations mean that previous research provides little information about the incentives provided by the UK labour market for HE study amongst most racial minorities, the disabled and late entrants. For example, whilst Conlon (2005) suggests that there are indications of significant labour market penalties in terms of hourly wages and hours worked for late learners, more detailed sources of data are necessary if this assessment is to be confirmed.

It is clear that the available data does not currently allow us to reach a firm conclusion to our research question. Larger databases and well-targeted and constructed micro studies are needed before we can assess whether for certain minority groups the labour market represents a significant barrier to widening participation. However, even if these were available and it was concluded that the labour market was a barrier for certain low participation groups, the cause of this barrier would remain to be investigated. Hence the importance of research which explores the matching process in the graduate labour market, looking at both graduates’ employment search patterns and graduate employers’ search behaviour.

9. Discussion

Summary

The review uncovers a number of important gaps in the evidence needed for policy and practice. Corroborating previous commentaries on the quality of research relevant to education, the review identifies a lack of clear knowledge about patterns of participation in HE, their causes, and how to improve them. The review also highlights concerns about the nature and use of large-scale datasets to assess the scale of the widening participation challenge.

Financial barriers to access have received increased attention with the introduction of variable fees. But there is a danger that the widening participation debate is being hijacked by fees and finance issues at the expense of more far reaching institutional change. Much of the research takes the structure of the current HE system for granted, and focuses on minor changes to improve the opportunities and experiences of students from under-represented groups. The review demonstrates that patterns of participation in higher education are highly influenced by family background and early experiences. Disrupting these learning trajectories is, at least to some extent, a broader role than the higher education sector is able to undertake. The majority of applicants with two or more A-levels in England progress to higher education. This leaves three alternative courses of action to widen participation for most people. The first is to increase the number of school pupils achieving two or more A-levels. The second is to find and sustain alternative access routes into higher education. At present a much lower proportion of students with suitable vocational qualifications continues to HE. There is some evidence available to suggest that once in HE these students can achieve as much as peers coming through A-level routes. The third would be a form of open access.

In common with other national systems we could adopt an alternative model of allocating HE places to all qualified students to help ameliorate patterns of participation – especially those between HEIs. The review raises a key question about the nature and purpose of higher education, noting that widening participation has, and will, change the HE sector, including the experience of the students. This calls into question the purported advantages of HE for the individual, society and the economy which are necessarily predicated in past experiences. Reflecting this, the review highlights current tensions in literature between a perceived economic imperative and an inclusive definition of a learning society.

In this final section of the report we specify gaps in research and areas where more research is needed before there is general agreement among commentators and policy-makers. This was a major objective set for the review. We make some more general observations about research in this area and summarise areas in which there is strong evidence or on which there is already general agreement. This was another major objective set for the review. We hope then that HE providers will find this summary useful in assisting their own widening participation activities. We conclude with a discussion of the nature and purpose of HE, and conclude by re-visiting the notion of barriers to access.

9.1 Some implications for research

The authors of this report undertook a review of the evidence on the barriers to widening participation in higher education in England. We found problems in the nature and use of existing large-scale datasets, meaning that it is not clear what the problem addressed by WP actually is, nor whether it is getting better or worse over time. There are, at time of writing, no ideal datasets for the analysis of patterns of participation in HE in terms of policy levers, or social, economic, or regional disparities. All existing datasets suffer from one or more defects: they include only participants, have incomplete coverage, have substantial proportions of missing data or cases, have changed key definitions over time, or are incompatible in range or aggregation with other datasets. These and other difficulties lead analysts to focus mainly on young participants taking their first degree, and this may bias public (and so policy) perception of HE issues.

We found problems in identifying ‘research’. Of the 60% of relevant pieces encountered that actually presented evidence, of which only a subset gave sufficient information to make some judgement of quality, a high proportion showed substantial flaws. Other than weakness in reporting evidence, the most common generic defect was the link between the evidence presented and the conclusions drawn from it. There were a number of repeated problems, only some of them outside the control of the researchers themselves. These included lack of controlled interventions to test what works, lack of suitable comparators even in correlational and observational designs, and the exclusion from research of those not participating in education even in research about non-participation. A typical piece of work in this field involves a small number of interviews with a group of existing *participants* in education, usually from the same institution as the researcher. Such a study cannot uncover a causal model, is difficult to generalise from, and tells us nothing about non-participants – the group that much work in this field is ostensibly concerned with. There is lack of agreement about how to compare differences over time and place. There is a general abuse of the purpose of statistical tests of significance. So common are these flaws, and not specific to research concerning widening participation in education, that they are not generally remarked on by authors, picked up in peer review, or taken into account when attempting to draw warranted conclusions from one or more studies.

We feel that it is important that all readers of this report are made aware of the limitations of the existing evidence on widening participation. In the more usual ‘systematic’ review these limitations are not so clear, for the simple reason that most research is routinely excluded from the review either because it is not a randomised controlled trial or because it is not of high quality – either in the conduct of the research or its reporting. If we had adopted a similar approach for this review, there would have been almost nothing to review. We encountered no randomised controlled trials (in fact no trials of any kind). Many pieces of research were reported inadequately, and many were of poor quality. Instead of simply excluding (nearly) everything, we decided to summarise what there was, but to ensure that readers retain an awareness of the limitations, and possible dangers to mislead, of our approach.

Using HE research as an example, a more general lesson can be drawn for lifelong education, and those who research it. When considering the impact, or otherwise, of measures to improve education such as initiatives to remove barriers to participation, there is an ethical responsibility for all evaluators to be more appropriately sceptical than at present. The scale or tenacity of the ‘impact’ must be such that it dwarfs the bias introduced by measurement errors, missing cases, and changes in data collection methods over time. There is no technical answer to the decision on how large or sustained the impact has to be. It simply has to be convincing, in context and with caveats, to sceptical observers (Gorard 2006a). Only then is it ethically appropriate to use public funding to act on the conclusions of the research (Gorard 2002b). The topics of most themes in this review could be subjected to rigorous trials, if the people claiming that they know what works in removing barriers to participation were prepared to test their claims through scientific scrutiny. These comments lead on to more specific suggestions for areas of future research.

9.2 Gaps in the research

In a sense the gaps in research are the things we cannot really review, or where the review suggests that evidence is especially weak or insufficient – at least in terms of the evidence uncovered by or provided to us in Phase One. In each case, we are optimistic and firmly believe that more and higher quality research is possible.

We can say with some certainty that we know very little about the following fundamental questions concerning WP:

- True contextualised patterns of participation – who actually gets what in HE? The quality of datasets makes it hard to say who is currently being ‘excluded’ from HE, who ‘ought’ to be participating, and how this is changing over time. This also makes it difficult to judge the success, or otherwise, of large-scale attempts to widen participation.
- What actually works, cost-efficiently, among smaller-scale interventions to widen participation? Those advocating specific interventions often claim success for them, but most interventions have had no rigorous evaluation. We encountered no randomised controlled trials or similar. This makes it difficult to judge the success, or otherwise, of any attempts to widen participation in the short term.
- Part-time students, finance and motivation. Existing datasets make it much easier to focus on full-time students, and this may be causing bias both in research and, even more importantly, in policy-making.
- Non-participants are largely ignored in the research literature – excluded both from education and also from the very research intended to address their exclusion.
- Early-life factors. When precisely does the ‘gap’ in educational equity appear, and why? Even lifecourse studies are left with an absence of causal model. How are the correlated factors, such as poverty, actually linked to educational opportunity?

In our assessment of the labour market as a barrier to widening participation we found that there appeared to be significant economic rewards to marginal entrants to HE

(treating all non-standard students as one group). However, the available data does not currently allow us to reach a firm conclusion as to whether each under-represented sub-group faces such incentives to enter HE equally. Larger databases together with additional well-targeted and well-constructed micro studies are needed before we can assess whether the labour market represents a significant barrier to widening participation for certain minority groups. Even if these were available and it was concluded that the labour market was a barrier for certain low participation groups, the cause of this barrier would remain to be investigated. Hence the importance of research which explores the matching process in the graduate labour market, looking at both graduates' employment search patterns and graduate employers' search behaviour.

Our review of research examining the importance of financial factors as barriers to widening participation found a relatively narrow evidence base for policy in this area. The extent to which the apparent success of the Education Maintenance Allowance Pilots will be replicated at the national level is difficult to predict. Additionally, the impact of the new funding system from 2006 on widening participation is uncertain. The current emphasis upon needs-based financial assistance in England contrasts with the US policy-makers emphasis upon merit-aid which is more solidly evidence-based. It seems likely that additional targeted financial assistance is required if an income contingent loan system is to co-exist with rising participation rates amongst under-represented groups. Therefore, evaluating whether the new system of funding in England provides that necessary targeted assistance efficiently will be an urgent priority for policymakers.

We found little research about the trends, experiences, barriers and interventions faced by disabled graduates. This is a significant omission in light of the funding council's policy commitment to widening the participation of disabled students. Furthermore, very little is understood about why mature graduates experience labour market difficulties. This review has found no evidence on the experience of students on vocational programmes such as HNCs, HNDs and foundation degrees. It might be inferred from the evidence that these students may experience labour market disadvantages, as these programmes tend to be in post-1992 institutions or FE colleges, and they may have vocational, as opposed to more traditional academic, entry qualifications. These programmes are also being targeted at non-traditional students as a lever for widening participation (Department of Education and Skills, DfES 2003). More information is required about students participating in non-traditional HE provision, including part-time, vocational, FE colleges, and non-degree programmes – and how this intersects with other labour market disadvantages (assessed by class, ethnicity, gender, age and disability).

Another area that does not appear to be addressed by the literature or research is the experience of students who withdraw part-way through their HE course, and enter the labour market. Does a brief HE experience accrue labour market advantages, or is it a disadvantage when seeking employment. Given the Government's commitment to a 'higher education experience' and the high rates of withdrawal of students from non-traditional groups in some institutions, this is a significant gap in the research literature.

Of the target groups used throughout the review, it also seems that those classed as ‘looked after children’, whose support needs and support systems are likely to differ to traditional students, are not addressed. Another group that might merit particular attention is local students. These students often live at home and experience specific problems with integrating socially. Hence, their support requirements and the difficulties they experience warrant separate investigation. It may be beneficial for future research to look in more depth at discrete groups of non-traditional students, such as those with a particular impairment, rather than ‘disabled students’ more generally, and those from different ethnic minorities, rather than amalgamating all non-white students into a broad category.

We also propose the following topics that are mostly unaddressed by the evidence collected for this review. They are more specific, and less important in isolation, than our first list:

- How important is institutional change in comparison to other factors (see below)?
- What is the balance between institutions changing and students changing?
- How can institutions change staff attitudes, values and practices?
- An exploration of assessment practice at subject level – there is limited evidence about the subject/discipline-specific assessment practices in higher education. The categories of assessment (summative and formative) in widespread use within the literature are general categories and do not necessarily account for variations at subject level.
- The contribution of assessment to student success and retention in higher education.
- The experience of students from different educational backgrounds in relation to assessment.
- How efforts to bring about provision for support are affected by the institutional culture and attitude.
- Identifying support practice – the sector could benefit from research to identify support practices that will benefit a more diverse student population as well as those practices which are effective in integrating support into teaching and learning practice.
- Critical points – there is evidence that support is particularly important at the point of transition and during the first year, yet there are other critical points during the course that are less well researched – such as when students approach examinations.
- Curriculum development practices that have the potential to benefit all students.
- Practices in higher education that enable students to both demonstrate and learn from their previous experiences.
- Adjustment to higher education – since lack of awareness has been found to be a factor in students’ adjustment to higher education, research could usefully be exploited to help inform those who are considering entering higher education so that they know what to expect and help them prepare for a course of study.
- The different approaches to learning taken by students from different backgrounds. Within the widening participation literature, there is an emphasis on differences across particular student groups and consequently less attention

being paid to difference within those particular target groups. Far from being homogeneous populations, students who share a common background may differ widely in their approach to learning.

- Discipline-specific teaching (and learning) strategies, which are adapted for the needs of a particular subject discipline rather than for the needs of a particular student group.
- Staff development – both in terms of its contribution to widening participation and in terms of evaluating the impact of staff development on the widening participation agenda.

9.3 Terminology and the deficit model

Students from non-traditional backgrounds are often portrayed to be ‘in deficit’, and therefore in need of additional (and separate) provision to rectify perceived weaknesses. This is evident, for example, in discussions of student support, where separate support is provided for particular groups of students rather than support being made available for all students. The research reviewed illustrates how staff often perceive problems (such as withdrawal by students from under-represented groups) as the fault of students, but further analysis finds shortcomings in learning, teaching, support and institutional issues. The evidence suggests that institutional change is required for support to become embedded throughout the institution. But a key tension is between making special provision for non-traditional students and marking them out as being deficient in some way.

Students from specific target groups are often portrayed as a homogeneous group, without cause to attend to the diversity that exists at the family, individual, cultural and educational level within a particular target group. Diversity and disadvantage intersect and change, and thus simplistic formulations of target groups and the difficulties faced need to be avoided.

The terminology being used to refer to students from non-traditional backgrounds fuels the dominance of the ‘deficit’ model. Such students are frequently referred to as ‘widening participation students’, and moreover, contrasted with those from more traditional backgrounds. Institutions refer to the need to identify students from non-traditional backgrounds for tracking and monitoring purposes which, despite good intentions, fosters a ‘them and us’ divide. This raises the question of whether there is any need to identify or acknowledge students’ background upon arrival at the university.

The terms ‘access’ and ‘widening participation’ are in common use, but they do not have a clear or shared meaning. For example, widening participation has been interpreted by some as increasing student numbers or recruiting more students from state schools, whereas a stronger equity focus would ensure that it was about greater access for students from groups that are under-represented in HE in comparison to their (qualified) population share. Furthermore, it is not clear whether widening participation should be the responsibility of the sector, the prior education sectors, or the individual institutions of HE. For example, passing responsibility to the individual institutions as HEFCE and the DfES have done in England could lead to institutions simply competing for the same individuals, leading to changes in patterns of

participation between institutions, without any benefits for the population as a whole. On the other hand, arguing that the responsibility therefore lies with the whole sector could promote a stratified higher education system, with no change occurring in some institutions, while others accommodate all the challenges of new student cohorts.

The review demonstrates that patterns of participation in higher education are highly influenced by family background and early experiences. Disrupting these learning trajectories is, at least to some extent, a broader role than the higher education sector is able to undertake. However, widening participation policy and practice needs to address not just access to HE – which has been the focus of much national and institutional policy-making in recent years – but the experience these students have in higher education too. Without addressing the nature of the higher education sector we will continue to perpetuate inequality, as certain students only have access to certain types of higher education experience (e.g. foundation degrees) and may be more likely to withdraw early from HE.

If the majority of applicants with two or more A-levels in England progress to higher education, then this leaves three alternative courses of action to widen participation for most people. The first is to increase the number of school pupils achieving two or more A-levels. The second is to find and sustain alternative access routes into higher education. At present a much lower proportion of students with suitable vocational qualifications continues into HE. There is some evidence available to suggest that once in HE these students can achieve as much as their peers coming through A-level routes. The third alternative (some form of open access) is discussed below.

All of these possibilities are for the benefit of the whole sector, as having a diverse student population could be of educational and social benefit to teaching and learning in higher education. Having a variety of educational, cultural, religious and family backgrounds can enrich the learning experience. The different perspectives and experiences students from different backgrounds bring to the learning context can be utilised to promote learning and teaching.

9.4 The notion of barriers revisited

In a very limited review of literature, with only 41 citations, 38 of which were to the Learning and Skills Development Agency (LSDA) or DfES, Macleod (2003) concluded that in order to widen participation in lifelong learning we must target especially those groups who are the least likely to come forward by themselves or even to respond to a ‘bootstraps’ measure such as *learndirect*. They concluded that there is very little knowledge of what works in trying to do this. From our own much larger and more focused review of evidence on the barriers to HE, we have to agree. Financial barriers to access have received increased attention with the introduction of variable fees. However, the returns available to the ‘marginal learner’ from the labour market still suggest that HE is a sound economic investment. This is supported by research from Australia that has found that the introduction of a student contribution scheme to cover the costs of HE has not altered participation in HE by students from lower income groups. Furthermore, when HE was free to students and living costs were covered by a grant, participation in HE by social class was not proportional, or more equitable than it is now. There is a danger that the widening participation debate

is being hijacked by fees and finance issues at the expense of more far-reaching institutional, lifelong and societal change.

There are different definitions of 'widening participation' informing different aspects of government policy and interventions: an Access discourse, focusing on raising the aspirations of a few gifted and talented working-class students to enter the 'top' institutions – a utilitarian discourse focusing on getting more people into HE to serve the needs of the economy by providing pre-entry support, supplementary study skills and vocationally relevant programmes, and a transformative discourse of widening participation through broader engagement and institutional change. A more explicit understanding of widening participation is required. This is likely to include who is to be targeted, whose responsibility it is, whether all institutions should play the same role, and whether it is institutions or individuals that are required to change.

Some of the research we have reviewed takes the structure of the current HE system somewhat for granted, and tends to focus on relatively minor changes to improve the opportunities and experiences of students from under-represented groups. The growth of the part-time sector, mature entry, non-traditional prior qualifications, and the conversion of polytechnics and colleges into universities, reflect considerable change in the HE sector in England in the last decade or so. But to some extent, this transformation has not matched the scale of change from an elite to a mass system in terms of student numbers. Entry to HE is on the basis of traditional means, programmes are largely unchanged, full-time study is the norm, leaving and re-entering HE is comparatively difficult, and effective credit transfer is elusive.

The work of this review brings into sharp focus a key question about the nature and purpose of higher education. In widening participation to currently under-represented groups are we seeking to offer a pre-existing experience of HE more widely, or are we expecting to change the nature of HE itself to accommodate the new kinds of students? For example, Christie et al. (2005) describe how non-traditional students attend high prestige universities on a local 'day' basis – they are day students – for good pragmatic and financial reasons. Previously, attendance at a high prestige university was on a 'boarding' basis. In fact, many Oxbridge students in this study find little difference to the culture of sixth-form boarding in private schools. The increase in day students means that the prestigious HEIs are widening participation by changing the way in which students experience HE. The WP students also report missing out on social and information networks available to the traditional 'boarding' students. This may be a small example, but it shows clearly that the first option of retaining a traditional HE sector open to access by 50% of the young age group plus mature students over the age of 30 may not be possible without a level of funding based on a higher proportion of gross domestic product (GDP). Widening participation has and will change the HE sector, including the experience of the students. It is already pertinent to ask whether a foundation degree student in a college of HE, for example, is experiencing anything like the same HE sector as one taking an honours degree in a high prestige university. But changing the nature of HE as experienced by WP students calls into question the purported advantages of HE for the individual, society and the economy which are necessarily predicated on past experiences. There are currently tensions in relevant writing between a perceived economic imperative and an inclusive definition of a learning society, which may upon analysis be found to be in conflict.

Another question inevitably raised by such a review concerns the element of compulsion now attached to post-16 education and training, including HE (Tight 1998). As participation widens, we are faced not so much with a learning divide where opportunities are only available to some, as with individual learning choices. Many people obtain much of their adult education through private reading, informal sources such as friends, and cultural institutions such as museums and art galleries and have long done so (Lowe 1970, Gorard et al. 1999c, European Commission 2001). At one level informal learning is simply learning 'which we undertake individually or collectively, on our own without externally imposed criteria or the presence of an institutionally authorised instructor' (Livingstone 2000, p.493). Informal learning is clearly valuable, but because it 'is not typically classroom based or highly structured, and control of learning rests primarily in the hands of the learner' (Marsick and Watkins 1990, p.12), this means that is not susceptible to targeting or even measurement in the same way as FE and HE.

The education system in England has compulsory schooling for all, based loosely on a comprehensive and egalitarian model, until age 16. A greater element of selection is introduced to continuation at 16+, such that prior attainment begins to influence how and even whether an individual continues in formal education and training (ET). This is despite growing pressure to continue in ET in some form. Some individuals leave formal learning at or even before 16 and never return. On one reading of the evidence, this is a key target group for the widening participation agenda – those least likely to participate again. At age 18, individuals face a heavily selective HE system, in terms of prior attainment, with little semblance of comprehensiveness. At best only 50% of the population are to be offered this learning experience. It is this abrupt change, and the anomalies it produces, that lie at the base of the WP issue.

To reach the conclusion that more WP work needs to be done to ensure equity for low-income students 'requires the joint assumptions that innate ability to benefit from education is completely independent of socio-economic circumstances and that equality of opportunity is essentially perfect for school education' (Hutton 2005, p.4). Neither has had much evidence presented for it. One possible class of explanations for the current and apparent under-representation of particular groups in HE rests on merit. There is the possibility that at least some of these surface inequalities are, in fact, more equitable in Rawlsian terms than they seem (Rawls 1971). If prior attainment is a key determinant of entry to HE, and that attainment is generally 'deserved' by the individuals concerned, then there is no injustice and no especial need to *widen* rather than simply increase participation. On one reading of equity (such as that proposed by Rawls), surface inequalities are only inequitable if they are not based on 'talent', where talent includes ability, motivation, and diligence.

Bond and Saunders (1999) warn against a thoughtless assumption that individuals from less advantaged socio-economic backgrounds fare worse in education and later life merely because of their class position rather than their prior ability or ambition. These authors present an argument, using the NCDS 1958 data, that the biggest influence on later occupational achievement for any individual is their ability, as measured by cognitive tests. Next most important is their motivation, as measured psychometrically. Once these are taken into account, then class origin is almost irrelevant as an explanation. Using a similar approach, Nettle (2003) shows that

childhood ability is associated with adult class mobility in a way that is uniform across the social classes of individual origin. This suggests that there is a high level of meritocracy in the UK, and little evidence that individuals from less privileged backgrounds have to be more talented to succeed than those from privileged ones. Although this is not the point made by their authors, one of the most notable features of the transmission matrices produced by Blanden et al. (2005) from both NCDS 1958 and BCS 1970 is the high level of social mobility in the UK for both cohorts. For example, in both cohorts around 17% of those born to the poorest families end up in the richest quadrant, and vice versa. If there were no inheritance and *perfect* mobility then this figure would be 25%. The difference from the ideal of perfect mobility in these tables containing 2,000 cases is represented by only about 25 cases in each of the ‘wrong’ extreme cells.

Of course, the metrication of ability and the idea of a relatively stable ‘motivation’ have both been heavily criticised. The idea of IQ as an innate general cognitive ability is now largely abandoned within psychology (Nash 2005), making ‘deficit’ theories used to justify unequal opportunities less plausible, and certainly less widely accepted. We now have multiple intelligences, a revival of Dewey’s collective intelligence, and an attempted separation of potential (as in the potential to learn language but which requires exposure), skill, and ability (the capacity to carry out skilled actions). This illustrates another example of the difficulties of drawing warranted conclusions over time, even from cohort studies. The meaning and acceptance of variables measured in one era, such as psychometric data from the 1960s, are no longer seen as valid in a later era. We could still compare IQs over time, but may no longer wish to do so.

The equity explanation at least alerts us to an important potential paradox in the widening participation agenda. If qualifications are deserved and used as entry requirements for HE, then it would be inequitable to change the system so that it is easier for less-deserving others to enter HE. Rawls’ (1971) difference principle would point out that it would be inequitable for someone with talent who has worked hard at school and home throughout their childhood to have the same chances of reward as someone with less talent who had not worked hard. On the other hand, if an individual’s level of qualification is not deserved then it is unfair to use this as an entry requirement for HE at all. We should either accommodate the applicant, or act so as to bring them to the required entry standard. We seem to be in a position, as a society, of saying that public examination results mean something, are a recognition of talent, and that it is tolerable to use them to decide on future life events (it is legal for employers to use them as a discriminator, for example). On the other hand, we are paradoxically saying at the same time that these qualifications are unfairly distributed across social groups, and implying that they are not deserved. We could either abolish qualifications as a discriminator, or seek political remedies to the non-educational inequalities that pre-ordain educational inequalities.

However, older applicants and applicants to some HEIs such as the Open University do not require traditional entry qualifications. In many ways this is also an anomaly producing confusion for WP. Given that estimates of the qualified age participation rate are currently near 100%, a more consistent policy of only allowing qualified individuals into HE would mean that fewer people would participate as adults and then mostly when they had later attained Level 3 qualification that they did not have

at age 18-19. Therefore, WP could consist of two major strands – improving the equity of the school system, and making it easier for older adults to return to formal learning whenever they wish. Neither approach is currently being used. The school system is diversifying and therefore segregating by SES. Funded opportunities for adults to take part in learning are being reduced.

On the other hand, a more consistent policy of abolishing the need for prior qualification and the system of selection in terms of qualification – overcoming the (inverse) ageism of the current system – would transform the HE sector. It would truly *widen* in addition to increasing access. Perhaps discrimination in terms of qualification will, in the near future, seem as unnatural as discrimination by sex, class, ethnicity, sexuality, disability and age do now – all of which were once considered acceptable (Walford 2004). There is, of course, a correlation between Level 3 qualification and university success, and between university outcome and success in employment, but we have to be very cautious about what this signifies. The correlations exist largely because we make them so. Students are only encouraged to stay at school if their GCSEs are ‘good’, only accepted at university if their Level 3 qualifications are ‘good’, and more likely to be offered a ‘good’ job if they have a ‘good’ degree from a ‘good’ university. In addition, Level 3 qualifications are highly predictable from earlier attainment, life events and personal characteristics (Gorard 1997). Taking a lifecourse view, qualifications are not seen as a causatory agent at all but as a substitute variable summing up the prior individual, social and economic determinants of ‘success’ at school and beyond (Gorard and Rees 2002). We do not select potential HE students on the basis of SES, ethnicity, age and so on, as this is both unfair and illegal. However, we do select them on the basis of a substitute variable that sums up, and is very heavily correlated with, such background factors. Why? The current approach is clearly not engineering a truly inclusive route to HE *without* qualification, although the foundation courses address a small part of it.

Other than the financial aspects of allowing anyone to enter HE, the major problem would then be one of how to determine who gets the places at what are currently considered elite universities if qualifications, and all of the inequitable lifecourse events that lead to them, are not taken into consideration. The 1992 HE and FE Act heralded the move from a binary to a unitary higher education system. However, the research evidence shows that hierarchy in the sector remains, and non-traditional students are more likely to attend a post-1992 HEI or an FE college than other universities. In common with other national systems we could adopt an alternative model of allocating HE places to all qualified students to help redress these patterns of participation. A threshold level, similar to a high school leaving certificate, could be required to gain entry to higher education. This could be two A-levels or equivalent, and places to specific institutions could be allocated by geography, disciplinary specialisation or randomly.

Appendix A – Problems in estimating patterns of participation in HE

There are no ideal datasets for the analysis of patterns of participation in HE in terms of policy changes, or social, economic, or regional disparities. All existing datasets suffer from one or more defects: they include only participants, have incomplete coverage, have substantial proportions of missing data or cases, have changed key definitions over time, or are incompatible in range or aggregation with other datasets. Such difficulties lead analysts to focus mainly on young full-time participants taking their first degree, for whom the data is most complete. This may bias public perception of HE issues, by apparently marginalising part-time and older students. Better links between school data and HE data for monitoring participation rates/levels are recommended.

To begin to establish that there should be more of a particular social group in HE than there is at any time we would first need to be able to define the group clearly, in such a way that the definition could be used by different people in different places at different times to mean the same thing. Unfortunately, the categorisation of social groups by occupational class or ethnicity is a matter of judgement (Lambert 2002, Lee 2003), the categories themselves are arbitrary (Gorard 2003), and they interact importantly with each other and with other categories such as sex. The categories have changed significantly in recent years in the UK, and the significance of the categories themselves (such as the meaning of being in a non-manual occupation) changes with their prevalence and historical/economic development.

To establish that there should be more of a particular social group in HE than there is at any time we would then need to know the prevalence of that social group in the relevant population. Unfortunately, when researching lifelong learning, it is not clear what the relevant group is. An analyst using figures for all adults is open to the charge that the inclusion of people over the age of 50, for example, is irrelevant since so few of these are currently participating in HE even though this represents around half of the population. An analyst using only young adults, however, is open to the charge of presuming that WP is only about traditional-age students. The population census only happens every ten years. Not everyone actually takes part, and not everyone who takes part responds to the class and ethnicity questions. The categories used for the class and ethnicity questions are not the same between years such as 1991 and 2001; nor are they always the same as those used in other large data sets – such as the individualised student records (ISRs) held by HESA for all students, the UCAS database of applicants, or the annual schools census.

We would next need to know the prevalence of the social group that had participated in HE. This apparently simple act of measuring also faces problems. We need to know what proportion of the population has already participated in HE (even if they did not receive a qualification). We need to decide whether to include Level 4 courses in FE colleges, Level 3 courses in HE institutions, postgraduate students, and professional training. We need to know whether we distinguish between England, UK, Commonwealth, and EU home students. If not, then our prior population figures become more problematic. If so, then some datasets make it difficult to distinguish between categories of home students. Any variation in these decisions over time, or between analysts makes comparisons difficult. As with the general population figures, there will be incompleteness in HE records, and for some years of the data the

'Individualised' Student Records are not actually linked to individuals but to courses, so that a part-time student taking two courses in two different institutions does not have a unique identifier, and is in danger of being counted twice.

Some studies have attempted to overcome some of these limitations by using postal code data with geographic information systems (GIS). However, these are still limited by the completeness, or otherwise, of the census. In addition, there is the added problem of the availability and accuracy of the home postcodes of students. For example, only 47% of Welsh-domiciled students in 2002-03 had valid postcodes (Taylor and Gorard 2005), and even this figure depends on some contestable assumptions about the nature of 'domicile'. Are students to be counted as domiciled where they reside to study, or where their parents live? Is it even possible to use the same definition of domicile for traditional-age and mature students? If not, does this make aggregation of their figures less valid? Once these decisions have been made, analysts are still faced by the fact that they are using GIS so that they can associate individuals with the average background characteristics of the area in which they live. Students are, thus, assumed to have the same occupational background as the modal category. Whether this can genuinely be agreed to improve the quality of analysis is debatable.

Finally, even in such a simple analysis as proposed here the problem that WP research is intended to solve must be considered over time, to decide whether policies and interventions had been effective or not. Changes over time, and their proper analysis, exacerbate the kind of data problems described so far. Each of these problems, in isolation, may be small but, in combination, they cumulate and interact. They mean that all relevant large-scale datasets will have a substantial error component before any analysis commences. The error component represents bias in the data and, because this bias is not generated randomly, the traditional techniques of analysis – such as significance tests, standard errors, or confidence intervals – cannot address it. As any analysis proceeds, the error component in the initial data propagates with every arithmetic operation. All of this means that we have to be very cautious about the interpretation of relatively small differences between groups or changes over time.

Difficulties of time

One of the problems in examining trends using different datasets is that the variables collected, or the coding used for the same variables, changes over time. Consequently it is often difficult to make genuine and straightforward comparisons over time or between groups. This is true, for example, of the HESA datasets in recording the ethnic origin of students in HE. Until 2001-02 there was only one category for 'white' students. Now a distinction has been made between White, White-British, White-Irish, White-Scottish, Irish Traveller and Other White. There are now, also, categories for a number of mixed ethnic groups, including mixed White and other. Whilst this may reflect changes in society, and could increase the completion rate for this field, it also makes comparison over time more difficult.

When evaluating the impact of change in policy or practice by looking at changes over time in participation, it is essential that a long-term perspective is taken. Otherwise a regular annual increase in any measure can be misguidedly attributed to a

specific policy, as frequently happens with the annual increase in GCSE and A-level scores, for example.

Analytically it is important when looking at changes over time to distinguish between at least two different kinds of changes. The first is historical change over time, affecting successive cohorts of learners, such as might be hoped for as a result of a policy intervention but which also happens due to longer-term social and economic change. The second is a change in the life of each individual learner, such as a decision to participate in an educational opportunity or not. In the aggregate, these two kinds of change can look very similar, and so lead to considerable confusion about the meaning of evidence. For example, Gorard et al. (2002a, 2002b) show that the impact of the setting up and monitoring of targets for lifelong learning in England and Wales has been widely misunderstood.

In England and Wales, the percentage of 16-year-olds attaining a Level 2 qualification at school, for example, is much higher than the percentage of retirees at age 60/65 with the equivalent. Every year, another cohort of relatively highly qualified individuals enters the working-age definition, and another cohort of relatively poorly qualified retirees leaves it. Some progress towards the target, as it is phrased, is made automatically each year without a single adult having to gain a qualification after the age of 16. This ‘conveyor belt effect’ has to be taken into account, before we can claim evidence of a positive change in adult learning since the introduction of targets.

Although not always as obvious as this, such confusion between historical change and ‘growing’ up’ is widespread in WP literature. One way of overcoming the problem is to use data from separate cohorts, and examine only the changes that occur over the life of each cohort, and subsequently to draw comparisons between different historical cohorts.

Missing data

Unfortunately, cohort studies of this kind introduce one of the other generic deficits of the datasets available for WP conclusions – the absence of substantial amounts of the relevant data.

Missing cases

A typical cohort study like the 1970 BCS uses a group of neonates and seeks permission to follow them through their lives. The study started with 16,695 cases in Britain. By 1999, 2,608 were untraced, 246 confirmed emigrated, 109 died, and 338 refused, leaving 13,394 cases (Bynner et al. 2000, p.31). Unfortunately, the cases dropping out at each ‘sweep’ are not random, so introducing a substantial bias for subsequent analysis. This potential for bias should be alerted by analysts and taken into account by analysts and their users, but this is not always so.

A study by Blanden et al. (2005) has been having considerable impact recently, appearing in many media stories which report that social mobility in Britain is getting worse over time. The authors state, without caveat, that ‘intergenerational mobility fell markedly over time in Britain’ (p.2). They back this claim up by presenting the partial correlations between the incomes of parents and children from two British cohorts. For example, their Table 5 shows that the income correlation over

generations was 0.166 for the 1958 NCDS and 0.281 for the 1970 BCS (see above). Therefore, according to these authors, the earlier British cohort exhibits greater social mobility than the latter. They have attributed this change over time to an increase in participation in HE which they claim has benefited middle-class families the most.

Nowhere in the reported findings is it stated that the British analysis only applies to male cohort members, or that cases without income themselves or whose parents were without income were omitted from the analysis. Nowhere in the tables of mobility and transition is it made clear how many cases are missing from the analysis. NCDS1958 originally had 16,460 cases, of which the Blanden et al. study used 2,163 or 13%. YCS70 originally had 16,695 cases, of which Blanden et al. used 1,976 or 12%. This 87% to 88% attrition rate must affect our reliance on the results. We need to ask whether the size of the apparent difference between the two cohorts is large enough to overcome reservations about bias caused by the selection of cases. Given that both cohort studies sampled differently in the first place, asked different questions in different orders, and had the usual levels of measurement error, it would be unwise to base policy on there being any genuine underlying difference. The purported explanations of the difference, such as increasing access to HE, are not needed.

While such cohort studies are especially prone to attrition, and so to missing cases, exactly the same kind of biases arise with non-response in more traditional 'snapshot' surveys, which have the added disadvantage of not being able to separate out the two dimensions of time. Raffe (2000) uses the Scottish School Leavers Survey to consider the characteristics of 16-19 year-olds who are not in education, employment or training (NEETs). He reports that around 31% of all cases in the survey are NEET at some time in the first three years after the end of compulsory schooling. For most of these young people this was only a temporary state – perhaps a period of transition or adjustment, and Raffe concludes that NEET is, therefore, a relatively 'normal' state rather than evidence of the existence of a worrying 'counter-culture' feared by some observers. This sounds plausible and may well be correct. However, only around 39% of cases in the relevant cohort responded to the sweep at the start of the period *and* the sweep at the end. If there were a counter-culture of 'status-zero' youths, rejecting education, employment and training then one might reasonably expect that these individuals would also be less likely to co-operate continuously in a cohort study. The 61% of cases missing from the analysis must affect our judgement about the conclusion drawn.

Biggart et al. (2004), for example, report a 42% response rate in their survey of the educational participation of 17-year-olds in Scotland. Connor (2001) used the Youth Cohort Study to identify a sample of students who had achieved the required grades but did not continue to higher education. The overall response rate was 41%. In total, 600 such potential participants were identified, but the achieved sample size for the study was only 29% of these (176). Of these, all previously thought to be non-participants, it later emerged that 36% had actually returned to education, possibly after taking a year out. In some studies, the reporting of response rates and sample sizes was unclear (Croll and Moses 2003, Mangan et al. 2001, Knowles 1997). All such non-response tends to bias survey results. It is not random and usually tilts the focus of research towards the more academically able and motivated (Payne 2001). Many surveys are still published without a primary response rate, making any use of

their findings ill-advised. In the absence of such information we have to assume the worst, and that the response rate is not given because it is low.

Missing responses

A further common problem for large-scale datasets lies in data missing even from existing cases. For example, many of the variables in the HESA datasets are compulsory – i.e. some value has to be reported for each student. But this does not mean that complete data are available for every student. The ‘missing’ data, which can include not known, information refused, information not yet sought, and other, often covers a large proportion of the students. One example is that other than ‘white’, ‘not known’ is the largest ethnic group among students in England. In fact, the unknown cases considerably outnumber all of the minority ethnic groups combined. Further, in 2002-03 45% of first-year undergraduates were unclassifiable in terms of occupational background. Consequently, the number of missing cases in an analysis using this variable could significantly bias the results being presented, even where the overall response rate is high. This means that any differences over time and place, or between social groups, needs to be robust enough to overcome this bias (among many others). The scale of a difference or change must be such that it dwarfs the bias introduced by measurement errors, missing cases, and changes in data collection methods over time.

UCAS applicant figures, and HESA Individualised Student Records , have a large proportion of cases with no occupational category. In fact, when these non-responses are added to those cases otherwise unclassifiable by occupation (through being economically inactive, for example) then having no occupational category becomes the single largest classification. Mayhew et al. (2004), for example, present an analysis of participation by social class using UCAS figures, in which 30% of students are occupationally unclassified.

Missing variables

A final consideration in the context of missing data involves missing variables. This is one of the most important and perhaps least reported type of missing data because the researcher is often unaware of it. This goes far beyond the omitted variable bias discussed in econometric models. To illustrate the way in which missing variables might affect the conclusions of research, consider the following example. HEFCE (2005) reports that around 30% of young people in England go to HE, and that participation is higher in Scotland. It also reports that a higher proportion of participants are in HEIs than in Scotland where HE in further education institutions (FEIs) is more prevalent, and then attributes the first to the second – for example in its Executive Summary it states:

‘In Scotland this is not the case: around a third of young entrants study HE courses in further education institutions (FEIs), which helps to make Scotland’s participation rate some 9 percentage points higher than England’s’ HEFCE (2005, p.9).

But a more plausible explanation should have been considered first. Levels of prior attainment at Level 3 are also higher in Scotland, meaning that we should expect higher HE participation there, because so much of entry to HE is predicated on prior qualifications. Hutton (2005) compares such an analysis of participation in HE that does not take prior qualifications into account to an analysis of regional patterns of

lung cancer that did not take patterns of smoking into account. Yet, such an approach is common (and the same criticism can be made of Gorard and Taylor 2001) because existing datasets from initial education do not link with individual student records from FE and HE at the time of writing.

The annual schools census does not ask for parental occupation, and the most commonly-used indicator of disadvantage that it provides instead is eligibility for free-school meals which is not used for applicants to HE. The UCAS figures for entry qualification to HE exclude the majority of each age cohort which does not participate. Therefore, it is not possible to compare directly the qualifications attained at school by different social classes with the rates of participation in HE. We can only estimate the relevant figures from sample surveys, often with high non-response or longitudinal dropout, and sometimes with incompatible measures of class or qualification. Coupled with the many cases in HE not classified by occupation, the situation for analysis is highly unsatisfactory. Yet, it must be stressed that this is the *only* kind of evidence available to studies of widening participation.

Appendix B – Sources used in the search for evidence

We have emailed the following groups or lists for help:

Action on Access
Bedford Lifecourse Group (incl. Centre for WBL)
British Educational Research Association (BERA) BERAmail
CATALYST
Centre for Higher Education Research and Information (CHERI)
Evidence for Policy and Practice Information (EPPI)
Economic & Social Research Council (ESRC) Teaching and Learning Research Programme (TLRP)
Engineering and Technology Board (ETB)
European Access Network
Forum for Access and Continuing Education (FACE)
HE Academy Institutional Research Network
HE Academy Registered Practitioners (15,000)
HE Academy subject centres and their contacts
HE Academy WP Liaison Group
HEFCE
Improving Student Learning (ISL)
Institution of Electrical Engineers
Joint Information Systems Committee (JISC) WPresearch mailbase
Learning and Skills Development Agency (LSDA) FE contacts
National Disability Team
National Foundation for Educational Research (NFER)
National Institute of Adult Continuing Education (NIACE)
QE-Net (Quality Enhancement Network)
Research Capacity Building Network (RCBN)
Scottish Access Forums
South East England Development Agency (SEEDA)
Society for Research into Higher Education (SRHE) – Access, student experience and educational development networks
Universities Council for the Education of Teachers (UCET) (post-16 committee)

We have also promoted the review at the following conferences and events:

Innovate to Retain conference, London
National Aimhigher Evaluation event, London
Aimhigher South West conference, Taunton
NIACE Learning Champions, Birmingham
FACE Executive Committee meeting, London
University of Portsmouth Teaching and Learning Conference, Portsmouth
TLRP ‘Phase Four’ Workshop, London

We have systematically searched the following journals for relevant research articles:

Active Learning in HE, 2000-2004
Adult Education Quarterly – 1999-2004
American Sociological Review 1997-2004
Applied Economics 2000-2004
Arts and Humanities in HE 2002-2004

British Educational Research Journal 1996-2004
British Journal of Sociology 1996-2004
British Journal of Sociology of Education 2004-1999
Economica 2004-2000
Educational Management and Administration 2000-2004
Educational Research 2004-2000
Educational Research and Evaluation 2004-1998
Educational Review 1999-2004
Educational Studies 1999-2004
Gender and Education 1997-2004
Higher Education Quarterly 1997-2004
Inclusive Education
International Journal of Lifelong Education
Journal of Access and Credit Studies 2000-2003
Journal of Access, Policy and Practice 2003-2004
Journal of Adult and Continuing Education
Journal of Education Policy 1998-2004
Journal of Further and Higher Education 1997-2004
Journal of Higher Education Policy and Management 1997-2004
National Institute Economic Review 2000-2004
Oxford Bulletin of Economics and Statistics 2000-2004
Oxford Review of Education 1999-2004
Quality in Higher Education 1997-2004
Research in Post-compulsory Education
Research into HE Abstracts
Research Papers in Education 2000-2004
Scottish Journal of Political Economy 2004-1997
Social Forces 1997-2004
Studies in Continuing Education 1998-2004
Studies in the Education of Adults 2000-2004
Widening Participation and Lifelong Learning -2004
plus other journals, as cited, on an ad hoc basis

We have searched the following online resources for relevant articles:

British Education Index
Econlit 1997-2004
Education-line – 1997-2004
ESRC website (general search and search of reports)
Joseph Rowntree Foundation – 1997-2004
SSRN 2001-2004
Association of Commonwealth Universities (ACU)
Council for Industry and Higher Education (CIHE)
Department for Education and Skills (DfES)
Department for Employment and Learning (in Northern Ireland) (DEL)
Higher Education Academy
Higher Education Funding Council for England (HEFCE)
Higher Education Statistics Agency (HESA)
Institute of Learning and Teaching (ILT)
Learning and Teaching Support Network (LTSN)
National Union of Students (NUS)

National Union of Students, Scotland (NUS)
Quality Assurance Agency for Higher Education (QAA)
Scottish Funding Council (SFC)
Society for Research into Higher Education (SRHE)
Standing College of Principals (SCOP)
Universities and Colleges Admissions Service (UCAS)
Universities Scotland
Universities UK (UUK)
Welsh Funding Councils (WFC)
Centre for International Higher Education, Boston College Centre for International
Higher Education
Carnegie Foundation for the Advancement of Teaching
Centre for the Study of Higher Education of the Pennsylvania State University
Academic Standards and Benchmark Descriptors: Developing Strategies for
Inclusivity
Aimhigher (DfES)
Association of Colleges
Association of University Teachers (AUT)
Forum for the Advancement of Continuing Education (FACE)
Foundation Degree Forward (FDF)
Guidance Council
Innovations Team
Learning and Skills Council (LSC)
Learning and Skills Development Agency (LSDA) (formerly FEDA)
National Association of Teacher in Further and Higher Education (NATFHE)

Appendix C – The ‘map’ of evidence expected

As explained in Section 1 of this report, we created an outline of the topics on which we would expect to find evidence. This ‘map’ is described below and was used to classify and search for material in our database (using the code numbers below).

1. Target groups

Factors affecting the participation of people in higher education will not be uniform. A targeted approach to widening participation has been adopted in England, and in many other developed countries (although the target groups differ).

1.1 ‘Working-class’.

There is UK-wide and international concern to improve the rates of participation of students from ‘working-class’ backgrounds.

1.1.1 Lower socio-economic groups (occupation)

1.1.2 Low participation neighbourhoods (geography/post codes)

1.1.3 Low income groups

1.1.4 First generation entrants (parents’ educational background)

1.2 Disability and health

Students with disabilities are one of the UK government’s target groups. We should also be aware of the problems for students with temporary health issues.

1.2.1 Physical disabilities

1.2.2 Learning disabilities

1.2.3 Mental health issues

1.2.4 Illness

1.3 ‘Minorities’

1.3.1 Ethnic and racial minorities

1.3.2 Religious minorities

1.3.3 Speakers of English as a second language (not international students)

1.3.4 Refugees and new arrivals (compared to second and third generation immigrants)

1.3.5 International students

1.4 Mature students

Historically, mature students (over the age of 21 in the UK) have been a target group for access work.

1.4.1 Aged 21 – 30

1.4.2 Aged 30 – 50

1.4.3 Older people (50+), university of the third age

1.5 Entry qualifications

A defining feature of some mature students is that they enter HE without A-level qualifications (via an Access course, APEL etc). Of particular significance in the English context are vocational qualifications such as Advanced GNVQs, Modern Apprenticeships, BTECs, HNCs and HNDs.

1.5.1 A-level qualifications

1.5.2 Vocational qualifications to Level 1 (Advanced GNVQ, MAS, BTEC, NVQ)

1.5.3 Vocational qualifications to Level 2/3 (foundation degrees, HNC, HND)

1.5.4 Unqualified

1.6 Women and men

Despite the transformation of women's participation in HE to the extent that they exceed male rates of participation, the rates of entry to some disciplines remain very low – e.g. around 14% in Engineering.

1.6.1 Science, Engineering and Technology (SET)

1.6.2 Other subjects

1.7 Other specific groups

We are open to research evidence and interventions about other targeted groups. For example, looked after children have only a 1% participation rate, and have started to attract the attention of researchers and practitioners. Similarly, homeless people, offenders and excluded pupils have relatively low rates of participation.

1.7.1 Looked after children

1.7.2 Homeless people

1.7.3 Offenders

1.7.4 Excluded pupils

1.7.5 Asylum seekers

1.7.6 Others

1.8 Non-specified groups

1.9 Multiple disadvantage and interaction (including two or more of above)

2. Factors impacting on participation throughout the lifecourse

Our review is adopting a lifelong learning approach to participation in higher education. It must therefore seek evidence throughout the lifecourse of the impact of specific policies and interventions to address different forms of disadvantage.

2.1 Contextual issues

2.1.1 Economic circumstances and poverty

2.1.2 Social and cultural issues

2.1.3 Health

2.1.4 Intergenerational mobility and family issues

2.2 Pre-school

2.2.1 Educational opportunities

2.2.2 Interventions in pre-school

2.3 Primary school

2.3.1 Teacher expectations

2.3.2 Parental attitudes and support

2.3.3 Peer engagement and socialisation

2.3.4 Student experiences

2.3.5 Role models

2.3.6 Motivation

2.3.7 Achievement

2.3.8 Interventions in primary education

- 2.4 Secondary school and college
 - 2.4.1 Teacher expectations
 - 2.4.2 Parental attitudes and support
 - 2.4.3 Peer engagement and socialisation
 - 2.4.4 Student experiences
 - 2.4.5 Role models
 - 2.4.6 Curriculum
 - 2.4.7 Options, choices and routes
 - 2.4.8 Information, advice and guidance (IAG)
 - 2.4.9 Learning and teaching strategies
 - 2.4.10 Motivation
 - 2.4.11 Attendance and exclusion
 - 2.4.12 Achievement – GCSE
 - 2.4.13 Achievement – Level 3
 - 2.4.14 Transition to post-16
 - 2.4.15 Post-16 and post-18 aspirations
 - 2.4.16 Academic preparation for HE
 - 2.4.17 Vocational pathways towards higher education
 - 2.4.18 Interventions in secondary school/college

- 2.5 Higher education
 - 2.5.1 Pre-entry support: motivation, preparation, course choice, IAG, role models
 - 2.5.2 Parental attitudes and support in HE
 - 2.5.3 Admissions processes: information, selection strategies, fair access
 - 2.5.4 Access and success in elite or selecting disciplines
 - 2.5.5 Induction and orientation to HE
 - 2.5.6 Peer engagement and socialisation
 - 2.5.7 Student experiences
 - 2.5.8 Curricular issues
 - 2.5.9 Learning and teaching strategies
 - 2.5.10 Staff attitudes and expectations, staff expertise and development
 - 2.5.11 Feedback and assessment
 - 2.5.12 Achievement and progression
 - 2.5.13 Personal tutoring and support
 - 2.5.14 Student services and facilities
 - 2.5.15 Fees and financial issues
 - 2.5.16 Part-time employment
 - 2.5.17 Flexibility and practical arrangements
 - 2.5.18 Employability and vocational relevance
 - 2.5.19 Retention and success
 - 2.5.20 Institutional leadership, mission, policies, interventions, partnerships, projects, practices and culture
 - 2.5.21 Institutional research, development, learning and change

- 2.6 Beyond higher education
 - 2.6.1 Labour market and graduate employment
 - 2.6.2 Postgraduate study
 - 2.6.3 Further opportunities for learning

3. Different sites of learning

Higher education takes place in different sites.

3.1 Universities and HE colleges

3.1.1 Selective, research intensive universities

3.1.2 Post-1992 institutions

3.1.3 HE colleges and smaller establishments

3.1.4 Specialist institutions

3.1.5 HEIs with a specific commitment to WP

3.2 HE in the FE sector

3.2.1 Large FECs with substantial HE provision

3.2.2 FECs with small HE provision

3.2.3 Impact of franchises, consortia and partnership with HEIs

3.3 Work based learning and vocational routes

3.3.1 Foundation degrees and other work-based learning

3.3.2 Progression from work-based to other forms of HE

3.3.3 Work placements

3.3.4 Employer attitudes and engagement

3.3.5 Continuing professional development (CPD)

3.4 Flexible learning

3.4.1 Distance learning

3.4.2 E-learning

3.4.3 Part-time study

3.4.4 Community and franchised learning

3.4.5 Mixed modes

3.4.6 Progression and transition

3.4.7 Three-year full-time models versus multiple entry and exit points and different timeframes (e.g. 2 years and 3+ years)

3.4.8 Mobility between programmes and institutions (e.g. credit accumulation & transfer scheme [CATS], APEL)

3.5 FE College (non-HE, e.g. Access)

3.6 Secondary school

3.7 Primary school

3.8 Pre-school

4. Policies and interventions

In relation to all of the above, we expected to see evidence about the impact of different types of intervention, including:

- Sure Start.
- Education Action zones and similar.

- Aimhigher (including Excellence Challenge and Partnerships for Progression).
- Mainstream institutional provision.
- Institutional projects and interventions.
- Widening participation performance indicators.
- Widening participation premiums.
- Widening participation strategies.
- Staff development.
- Sector-wide bodies.
- Institutional support services.

Appendix D – The quality of existing research

This appendix establishes, through a few examples of much wider issues, that we are not able to use the source, author, method, or scale of research reports as any guarantee of quality. It also demonstrates that the major problem lies in the conclusions drawn by the reports' authors. Therefore, in the main part of our report we generally present the evidence uncovered by prior studies, and largely ignore the conclusions drawn from that evidence by others.

In the absence of clear evidence about what works to widen participation, it is difficult justify using public money for any unwarranted intervention, policy or practice. Rigorous experimental approaches to the widening of participation in HE are rare. For example, in a review of literature Hudson (2005b) reported many examples of creative WP activities but no examples of rigorous evaluation of the impact of these activities or, indeed, evaluation of any kind. In our review, we encountered no evidence based even loosely on an experimental design.

An evaluation of Aimhigher (originally Excellence Challenge) intended to improve access to HE for young students from poor backgrounds, was actually a report of the WP activities undertaken by HEIs (Pennell et al. 2004). It contained self-reports from HEIs of increased applications from specific groups, but no proportionate analysis. Experimental approaches do face practical and ethical difficulties (although these are less relevant than often assumed, see Gorard 2002b). In the absence of such tests of causation, it is – or should be – extremely difficult to draw conclusions about what actually causes or hinders changes in patterns of participation over time, and so about how to widen participation. Causal models have been claimed based on multiple and uncontrolled interventions (i.e. merely contemporaneous events), on the reflexive accounts of students themselves, and on the complex modelling of existing numeric datasets. While often interesting and indicative, none of these claims can actually be justified by the logic of their research design. Therefore, one of the first recommendations of this review must be that such studies are no longer promoted or accepted so readily, and that, if we genuinely wish to know how to widen participation then a series of controlled trials and design experiments each based on only one intervention should be conducted.

Even in the situations where a controlled experimental intervention to detect a cause:effect relationship is not possible, it is still possible to compare research findings for the area or group in focus with the equivalent findings for another group. This has to be done carefully, but is not technically difficult. Presumably it is so rare in the widening participation literature partly because it involves more research and so, perhaps, greater expense. If we intend looking at the impact of the introduction of tuition fees on patterns of participation, for example, then we need to consider the patterns both before and after the introduction of fees, and to consider both those who do and do not participate. Instead of the involvement of these four groups, over a period of at least two years (the year before and the year after) which is essential to make even tentative claims about impact, a typical study would involve only a consideration of current participants usually in the institution of the researcher. This convenient approach to 'evidence' gathering is widespread. The examples discussed in this appendix are representative of a much larger literature.

Missing comparators

UCAS applicant figures alone give us no idea at all about who is *not* applying to university, and yet numerous analyses are reported without making clear the implications of this deficit (e.g. Abbot and Leslie 2004). The Rees Report (2001) on student hardship in Wales asked students whether lack of finance was a hindrance to their participation. It did not ask individuals who had not become students and had not considered becoming students whether lack of finance was a barrier to their participation. This would take longer, and involve a harder to define and capture sub-sample of the population that may be influenced by changes in student finance.

A rather extreme version of the lack of comparator comes from Lawy (2000), even though this concerns, unusually, a non-participant. This paper illustrates the experience of one person who left formal education at the age of 16, and started work. The main finding appears to be that this person continued to learn even outside formal education. We have no way of knowing, from this evidence, whether people who stay in education or who leave education but do not start work also continue to learn. The fact that school leavers continue to learn when they start work does not, for us, change the truth status of any prior proposition. As such, the evidence is of no research consequence, but still appears as a peer-reviewed paper in a very high status Social Science Citation Index (SSCI) research journal.

A more substantial piece of work that also illustrates a missing comparator problem was funded by the DfES. 'Action Learning in the Community' was a large action research project conducted in two universities and four other sites including adult education and community colleges (The Learning from Experience Trust 2004, mimeo). The research explored 'innovative ways of attracting and retaining potential students from some of the most socially excluded and marginalized groups in society' (p.1). The summary report describes the various actions undertaken in support of this key aim, but is unable to describe whether they made any real difference. As the report states 'we have no longitudinal data on (the) ultimate success of the student cohort or their ultimate levels of retention or success' (p.6). If the project was too brief to allow follow-up data to be analysed then it was a waste of money as research (and therefore, of course, we have no way of knowing whether it was also a waste of money as action).

Another strand of this same general problem is represented by the work of Archer (2002), on the post-16 educational choice of Muslim girls. The article does not establish at the outset whether there is a particular problem with the post-16 participation of Muslim girls that is worth researching. Other studies suggest that women of Pakistani and Bangladeshi origin, among whom we would expect to find many census Muslims, are well-qualified and well-represented in all areas of post-compulsory education (e.g. Ahmad 2001).

The research asked 14-16 year-old students about longer term societal changes that have made it easier for Muslim women in north west England to participate post-16, and quotes their responses as evidence. But the question has to be asked whether 14- to 16-year-olds are the best source of information on past changes in post-16 educational opportunities, and what emphasis we should give to their opinions on what their choices might have been like three, five or ten years ago? The point being

made is not that these students are wrong (they may, for example, be correctly portraying the knowledge of others) but that the conclusions of the researcher cannot be based securely on such evidence.

Although the comments of some 'Muslim' boys are presented in the paper, none of the comments are presented with their relative prevalence among the (unknown) number of boys and girls in the study. It is also interesting how few of the 64 individuals are quoted, even though a few are quoted repeatedly. Therefore, we have no reason to believe that the comments from girls (or boys) could not equally have come from boys (or girls). Even worse, because there is no non-Muslim group, we have no way of knowing whether the same comments could equally well have stemmed from non-Muslims. When on page 370 a student describes how Muslim girls have more 'freedom' than in the 'old days' we do not know whether this increase in freedom is true or illusory (see above) nor whether it would also appear in the stories of non-Muslim girls. Similarly, when Muslims suggest that their parents are influential in their decision to participate post-16 does the author think that these comments are especially specific to this group? Biggart et al. (2004) suggest from a much larger-scale study that parents are the major influence for 16-year-old choosers in all social groups.

A surprising number of the studies encountered in our review, similarly, did not have groups against which the findings could be compared. For example, Barrett's (1999) study considered the process whereby 12 white males who were not expected to achieve benchmark GCSE qualifications decided whether or not to remain in education post-16. The majority of these students wanted to continue in post-compulsory education but their justifications for following particular routes in particular colleges were not compared with students who were likely to achieve higher scores in school examinations. This absence of a comparison group means that we do not know whether the views of the sample were typical of the students in the study or whether students of higher ability would view the barriers to study and the choice process any differently. This limits the applicability of the results and brings into question any use that researchers and education providers can reliably make of the findings.

Inappropriate comparators

Even where explicit comparisons are made in research reports, they are frequently inappropriate. In one influential study, Blanden et al. (2005) claim that inter-generational income mobility was much less in Britain than in six other comparator states. 'International comparisons indicate that intergenerational mobility in Britain is of the same order of magnitude as in the US, but that these countries are substantially less mobile than Canada and the Nordic countries' (p.2). Their Table 2 shows that the income correlation over generations was 0.271 for Britain (1970 BCS) but only 0.139 for Norway. Therefore, social mobility is reportedly lower in Britain than in Norway (and the other Scandinavian countries, Canada, and West Germany). The researchers are ready with reasons to explain the poor social mobility in Britain, largely on the basis that it used to be better but has declined with increased access to HE.

Their international comparison uses cohorts from 1958 in Norway, from 1958-1960 in Denmark and Finland, and from 1962 in Sweden (see Table A1 repeated from p.6 of

their paper). If the income correlation over generations from the 1958 British cohort (quoted by the authors as 0.166 in their own Table 5) is compared to these four, then the conclusion would have to be that (male) social mobility is about the same in Britain and in Scandinavia (plus Canada and West Germany). However, what the authors do instead is to compare the results from the 1970 British cohort with the 1958 Norway cohort, and others, to reach their conclusion that social mobility is worse in Britain. The paper contains no account of why this unlikely comparison is preferred.

Table A1 – Internationally comparable estimates of intergenerational mobility

Country	Sons born (year)	Partial correlation
Britain	1970	0.271
Norway	1958	0.139
Denmark	1958-1960	0.143
Sweden	1962	0.143
Finland	1958-1960	0.147

The DfES (2003) states that the gap in achievement between social groups starts early and that ‘the attainment gap continues to widen through the phases of education, although the pace of increase slows down once children reach seven years of age’. But such comparisons are not possible. There is no standard test that can be given to students of all ages to test for gaps in attainment. What this statement really means is that the arbitrary percentages of students attaining a series of different threshold scores at each age get larger with age. It treats the expected level of 2 at Key Stage 1 and Level 4 at Key Stage 2, or the percentage able to read and write at age six with the percentage gaining five or more GCSEs at age 16, as though they were based on the same metric. But given that the expected level is arbitrary, not cross-moderated, and not calibrated against the cohort to which it applies, we can change the size of the apparent achievement gap between social groups simply by changing the ‘expected’ levels.

Work presenting numeric analyses routinely presents differences between groups over time or place without regard to the scale of the numbers in which the differences appear. As an extreme illustration, imagine a social system with only two social classes, in which 1% of social class A attend HE while none of social class B do. In this society, therefore, all HE students come from class A, and to be born to class B means no chance at all of education at university. Now imagine a similar society with the same two classes, in which 50% of social class A attend HE while 49% of social class B do. Would it be true to say that equity between social classes is the same in both societies? Clearly not. But according to the Government (at the time of writing), most of the media and many academics, both of these societies are *precisely* equal in their equity of access to HE by social class. Their logic would be that the difference between the participation rates in the first society is 1% (1-0), and in the second society it is also 1% (50-49). This prevalent misunderstanding of the use of numbers when comparing changes over time or place between two or more groups is widespread (Gorard 2000).

This error appears in the DfES (2003) report ‘Widening participation in higher education’. On page seven, the report presents a graph showing the participation rates in HE from 1960 to 2000 of two social groups – those created by collapsing social

classes I, II and IIIN (mislabelled IIN in the report), and classes IIIM, IV, and V. In 2000, 48% of the first group (non-manual) and 18% of the second group (manual) attended HE as full-time traditional age students. In 1990, the figures had been around 37% and 10% respectively (Table A2) and the DfES describes this earlier position as better in terms of equality of access because 37-10 is less than 48-18. It even claims that ‘if one turned the clock back to 1960 when there were just 200,000 full-time students, the gap between the two groups was actually less than it is now’. This claim is based on the fact that 27-4 is less than 48-18. Presumably, if the 1950 figures had been 22% and 0%, with no one at all attending HE from the less privileged group, then the DfES would describe this as even better in terms of equity because 22-0 is even lower than 27-4.

Table A2 – Participation rates by social class over time (%)

Social class	1960	1990	2000
I/II/IIIN	27	37	48
IIIM/IV/V	4	10	18

What it has done is to use a difference between two numbers with no regard to the size of the numbers involved (as though an increase of 10mph for a bicycle was the same as for a jet aircraft). Viewed proportionately, the situation in 2000 is more equal than in 1990 which is more equal than in 1960. A person in the manual group had around four and a half times as much chance of attending HE in 2000 as in 1960. A person in the non-manual group had only around one and three quarters times as much chance of attending HE in 2000 as in 1960. Or looked at in another way, the chances of going to university in 2000 were 2.7 times greater for social group I/II/IIIN than social group IIIM/IV/V, whereas in 1990 the chances had been 3.7, and in 1960 they had been 4.8 (Gorard 2005b). The situation was, therefore, better in terms of equity, in this limited respect at least, in 1990 than 1960 and better in 2000 than in 1990.

One of the consequences of this misunderstanding by the DfES and others is that other evidence relevant to widening participation is then misinterpreted. If, for example, a researcher or adviser believed that the figures in Table A2 showed increasing inequality of access by social class then they may conclude, wrongly, that a policy or practice that had actually been helpful was unhelpful or harmful, and *vice versa*. The implications of all this, once understood, are remarkable. The Government (the key funders of WP) and many others have little idea about the patterns and trends of under-representation in HE.

Problems with causal models

A simple example of reporting unwarranted causation – unwarranted because of a lack of comparison over time or between groups – comes from the Sutton Trust (2004, p.5):

‘Since 1997, universities, the Government and the Sutton Trust have been funding a range of programmes – such as summer schools, partnerships between schools and universities, and the use of outreach officers – to make it easier for suitably qualified state school students to apply to our leading universities. Again, the facts about the impact of these initiatives should be allowed to speak for themselves: both the number

and the proportion of state school students entering these institutions has increased considerably over five years.’

This claim manages to combine ignorance of the need for a comparison or control group, with the problems of uncontrolled multiple interventions, and the fallacy that temporal association is the same as causation (Gorard 2002c). The Sutton Trust authors can have no idea whether any of these several interventions was effective, which were effective and which were not, or whether the same changes in university applications would have occurred in the absence of any of them. For example, Gorard (2000) shows that the A-level results of students from state-funded schools have been catching up with those from private schools as part of a trend that is more widespread than the impact of the initiatives described by the Sutton Trust, and which pre-date 1997. The results for private schools in England were nearer reaching a threshold effect in 1997 than the results for state schools. So, in an era of annual improvement in A-level scores, we would expect an increased proportion of applications and acceptances at HE for state-funded students even in the absence of any intervention at all. The more useful question is not have state schools applications increased since the inception of this ‘range of programmes’, but have they increased by substantially more than would be predicted by longer historical trends, and have they done so specifically in the geographical areas and sectors most affected by the programmes.

This example illustrates two important lessons for a review such as ours. The criticism of the causal conclusions drawn by the Sutton Trust (2004) does nothing to disturb their evidence itself. The evidence shows that the number and proportion of state-school entrants to ‘good’ universities has risen. This is not in dispute. What is disputed is the warrant that leads to the causal conclusion (Gorard 2002a). Therefore, in a critical appraisal of evidence on WP, the *evidence* of such a study should be included, while the conclusions are discarded. Secondly, the evidence in the Sutton Trust report is presented clearly enough for this separation of findings and conclusions to happen. In many pieces, however, the conclusions are presented at the expense of the evidence, or with only indications of what the evidence might be. We cannot privilege such reports over those like the Sutton Trust that give us enough information to see that the conclusions are not entailed by the data.

Practitioner research

The often fruitless nature of ‘reflexive’ research has been commented on before in other sectors of education (Gorard 2002d). Reflexive work, perhaps by practitioners themselves, is common in widening participation research. Our experience from the review is that it is usually conducted without appropriate comparator groups, indeed without any comparator groups at all, with very small opportunity samples from the same institutions as the researcher. It typically does not involve interventions, controls, or even any explicit analysis of patterns or trends. It is not longitudinal in any meaningful sense. There is, therefore, no way of assessing its propositions or generalising its results.

For example, Beck et al. (2004) summarise six such projects, of which three focus on access to education and the barriers to learning that affect recruitment and admissions. Yet all three of these pieces of ‘research’ involve only accounts of existing students, so are, by design, unable to address barriers to, or problems of, recruitment (since

those most affected by the problems have been excluded from the study by the design). The account of the first of these three WP studies contains no description of methods, and so gives the reader no idea of sample size, method of analysis and so on. The report consists of isolated quotations from unknown sources, presenting ideas of unknown prevalence, and a series of 'implications' for policy and practice. The second WP study lists five very broad research questions, including how women see themselves as wives, mothers, learners, workers, and individuals. However, there is no way of assessing how these questions were addressed since there are, again, no formal methods presented. The introduction talks about 'interviews' with an undisclosed number of women, and the report would have been no longer if the author had simply stated how many women were involved. It presents a list of 'findings', whose quality in relation to the methods we can not assess. The third WP study lists several ambitious aims including an evaluation of the work of referral agencies. Again, no sample and no methods of data collection or analysis are given. However, it is clear that this study like the others involves talking to the researcher's own students. This would give such a partial view of the role of referral agencies as to be near useless, or even dangerously misleading.

Sampling issues

In addition to the absence of comparison groups in several of the best and best-reported studies we reviewed, there are also concerns about the value of the samples. One example is Francis' (1999) study of the various arguments and discourses that young people draw upon when talking about post-compulsory education. This piece was based upon interview and observation studies of 100 students in three London schools. The sample was drawn from middle and top set Maths and English classes. Perhaps unsurprisingly, given the nature of the sample, 98% of the pupils involved in this study wanted to remain in post-16 education. The number wishing to continue was likely to have been lower in the 'bottom' sets which were not included in the research. Again, the likely non-participants are left out of research on participation. Another issue relates to sampling strategies and in particular the achieving and reporting of sample sizes. Achieving robust response rates were problematic for several of the larger scale questionnaire surveys. For example, Connor's (2001) postal questionnaire survey of 4,000 undergraduate students had a response rate of 41%. The Sutton Trust's (2002) survey also achieved a response rate of around 40%. On occasion, the reporting of response rates and sample sizes was unclear (Croll and Moses 2003, Mangan et al. 2001, Knowles 1997). The potential for bias in the results, caused by systematic non-response, is considerable.

For smaller scale studies there were problems with the degree to which the findings could be generalised. This was particularly apparent when results were reported as percentages, masking the small numbers of respondents. For example in Moogan et al's (1999) study, 23% of the main sample wanted to attend university in order to help secure a well paid job. In a sample of just 19 students, this represents a very small number indeed (four students perhaps).

Many of the studies considered in this review included large proportions of students who had already made the decision to participate in post-16 (Francis 1999, Barrett 1999) or post-18 education (Brooks 2003, 2004). Students who chose not to participate were substantially under-researched. There were some studies that

specifically set out to examine the decision making process of students who were intending to apply for HE (Moogan et al. 1999, Mangan et al. 2001). Even where all potential students were considered, the treatment of the findings tended to follow a pattern whereby the students are partitioned into those who do or do not intend to participate. They draw the readers' attention to the existence of the non-participants, perhaps describe some of the reasons that they give for this choice, and then switch the focus of the paper only to those students who are going to participate.

Perhaps this degree of attention is unsurprising given the difficulty of locating and then including students who choose not to participate in post-compulsory education. Connor's (2001) study used the Youth Cohort Study to identify a sample of students who had achieved the required grades but did not continue to higher education. In total 600 such potential participants were identified, but the achieved sample size for the study was only 176 (29%). The problems in identifying those who opt out completely from post-compulsory education was further highlighted in this study when it emerged that 36% of the students previously thought to be non-participants had actually returned to education, possibly after taking a year out. This meant that this study was able to identify only 63 out of a possible 600 students who so far as we can tell did not participate in higher education even though they had achieved the required grades.

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(for the full list of references from Phase One, see
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