

Barriers to progression: perceptions of learners on vocational courses in animal-related subjects

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Introduction

Contextual background

The recent decade has seen an increasing interest in issues relating to progression of vocational learners into higher education (HE) (see Jones, 2009 for a review). This is largely as a result of the government white paper on the future of higher education (Clarke, 2003) and the *Fair Enough* report (Sinclair, 2003). Both of these raised awareness of the importance of widening participation (WP) in HE, and led to government investment into various projects aimed at facilitating access to HE. The Schwartz (2004) report identified minimising barriers to progression as one of the five main objectives for a fair admissions system.

There are also logistical reasons for the increased interest in recruiting learners from non-traditional backgrounds: the traditional entry route to HE is largely saturated (Hatt and Baxter, 2003), so in order to reach the Government's 50 per cent participation target, institutions need to recruit from a more diverse entry base. Long term recruitment strategies must also take heed of predictions that, due to a demographic drop, the population of traditional age undergraduate entrants to UK higher education institutions (HEIs) will fall by 4.6 per cent by 2020 (Ramsden and Brown, 2008).

Several studies have highlighted that progression rates to HE are lower in the case of vocational learners than for those from a traditional A level background (e.g. Gittoes, 2007; Action on Access, 2005). Thus there has been much interest in exploring why so few learners with non-traditional qualifications progress on to HE, with an accompanying recent increase in literature around the barriers facing 'non-traditional' applicants. Several issues have been identified, including: lack of parity of esteem of vocational qualifications versus traditional ones (e.g. Vickers and Bekhradnia, 2007; Connor et al., 2006), poor information and guidance (Connor and Little, 2005), students' backgrounds and personal characteristics (e.g. Gorard et al., 2006; O'Hara and Bingham, 2004), and staff attitudes and awareness (e.g. Connor et al., 2006; Thomas et al., 2005). Several other studies have identified that there is limited evidence relating to how students with vocational qualifications are being supported into and through HE (e.g. Thomas et al., 2005). A comprehensive review was recently presented by Gorard et al. (2006).

Much of the research to date has focused on institutional and general demographic aspects, but arguably the most important factor of all is the learners' own perceptions. A study by UCAS (2002) found that confidence about progression varied according to qualification

studied and type of post-sixteen institution attended. Students studying A level at school or sixth form college generally had high aspirations, reinforced by teacher support. Conversely, learners in further education (FE) colleges had lower rates of aspiration and progression to HE than those in schools. Fitton (2001) found a link between the student's current course and plans to go to HE, with students studying vocational qualifications being much less likely to consider progressing to HE than A level students. Progression rates also varied according to subject discipline.

Progression in animal-related subjects

Vetnet Lifelong Learning Network (LLN) was initially conceived to improve progression opportunities for vocational learners wishing to study Veterinary Science and Veterinary Medicine, but was subsequently expanded to incorporate all applied animal-related courses.

The main animal-related vocational qualifications at level three are the BTEC National Diploma (ND) in Animal Management and National Diploma in Horse Management. A recent Higher Education Funding Council for England (HEFCE) report showed increasing numbers on ND courses, with total registrations more than doubling from 2002-03 to 2005-06 (Gittoes, 2007). It is difficult to assess numbers in animal-related courses as Edexcel, the awarding body, does not publish figures relating to breakdown on BTEC populations. Anecdotal evidence from further education college (FEC) course providers suggests that the numbers of learners studying animal and equine management courses have increased dramatically in recent years.

There is little information available regarding progression to HE for learners studying animal-related topics: course information tends to be amalgamated into larger subject areas, e.g. agriculture. Gittoes (2007) identified that agriculture and related areas had one of the lowest progression rates (25 per cent) but it is not known how animal-related courses compared to the other subjects collectively analysed in this group.

There are a number of issues with the way information is gathered and used by the Higher Education Statistics Agency (HESA). For example, HESA data on highest qualification by entry still aggregates several level three qualifications into one group leading to lack of detail (Sinclair and Connor, 2008). There is also anecdotal evidence that many data returns to HESA are made when qualifications are not complete. Sinclair and Connor (2008) suggest that data should be more widely available according to type of vocational award, subject and grade, so that progression routes and performance at HE can be more effectively evaluated.

For those applying to study Veterinary Medicine, the A level route is overwhelmingly the favoured entry route, with limited opportunities available for learners who have progressed via a vocational pathway (Robinson et al., 2007). Yet veterinary practitioners frequently comment that they would like to employ graduates with better practical skills (Royal Veterinary College, 2005). Parry et al. (2006) highlighted a comparable situation in relation

to access to medical courses, where demand from applicants similarly exceeds the number of places available. Indeed this seems to be the norm for any academic, highly selective degree course (Connor and Little, 2005). Sinclair and Connor (2008) state that although there has been some progress in parity of esteem between traditional and vocational qualifications since the WP agenda was introduced, selecting courses and institutions still have conflict between the WP agenda and aspirations to be a ‘world class university’. Staff at some HEIs may also be concerned by the additional support needs of a more diverse student body. There is consequently much disparity in terms of the proportion of vocational learners at different institutions (Faithorn, 2005).

In addition to Veterinary Medicine and Veterinary Science, UCAS course search (www.ucas.ac.uk) reveals that there are currently over 500 HE courses offered in animal-related subjects in the UK. These are often delivered in FECs and post-1992 HEIs so it would be expected that progression opportunities are greater: Faithorn (2005) and others have suggested that vocational learners are more likely to study at FE-linked institutions.

To address the deficit of information available for our learner constituents, the current study aimed to gather data relating to progression intentions of learners on level 3 vocational courses in animal-related subjects. Rather than focusing solely on progression rates, the aim was to also explore the underlying reasons. HESA destination data focuses on progression rates rather than identifying the reasons for learners’ decisions. Addressing the latter would allow institutions to review and amend information, advice and guidance (IAG) provided to level three learners so that they can be better advised regarding the progression options available beyond their FE course. The study was therefore designed to explore progression issues from the learners’ perspective.

Method

Participants

The original data set of 204 participants was reduced to a final 176 participants (18 males and 158 females) who were in their final year of BTEC ND courses in animal-related subjects. In order to ensure homogeneity of the sample, learners studying level three courses other than the National Diploma (e.g. the Advanced National Certificate) were not included. Mature students (21 years of age or more) were also excluded as they skewed the sample distribution, and due to the fact that they may be offered places at university independent of their academic achievements.

Procedure

A questionnaire was devised following consultation with tutors from participating institutions. Demographic information was gathered along with details of academic achievements to date. The main bulk of the questionnaire asked participants to score their reasons for progressing/not progressing to HE using a seven point Likert scale.

Table 1: Identification of differences between participant groups

Variable (measure of central tendency in parentheses)	Participants aiming to progress to HE (n=69)	Participants not aiming to progress to HE (n=118)	Test statistic	Test value
Age (mean)	19	19	t-test	.57
Gender (n/a)	M: 10% F: 90%	M: 11% F: 89%	Chi-square	.21
English GCSE (median)	C	C	Mann Whitney	.10
Maths GCSE (median)	C	C	Mann Whitney	.13
Science GCSE (median)	C	C	Mann Whitney	.10
Current performance assessment (median)	5	5	Mann Whitney	1.75
Performance Aims (median)	5	4	Mann Whitney	2.39*

Note: *Correlation is significant at the 0.05 level (2-tailed)

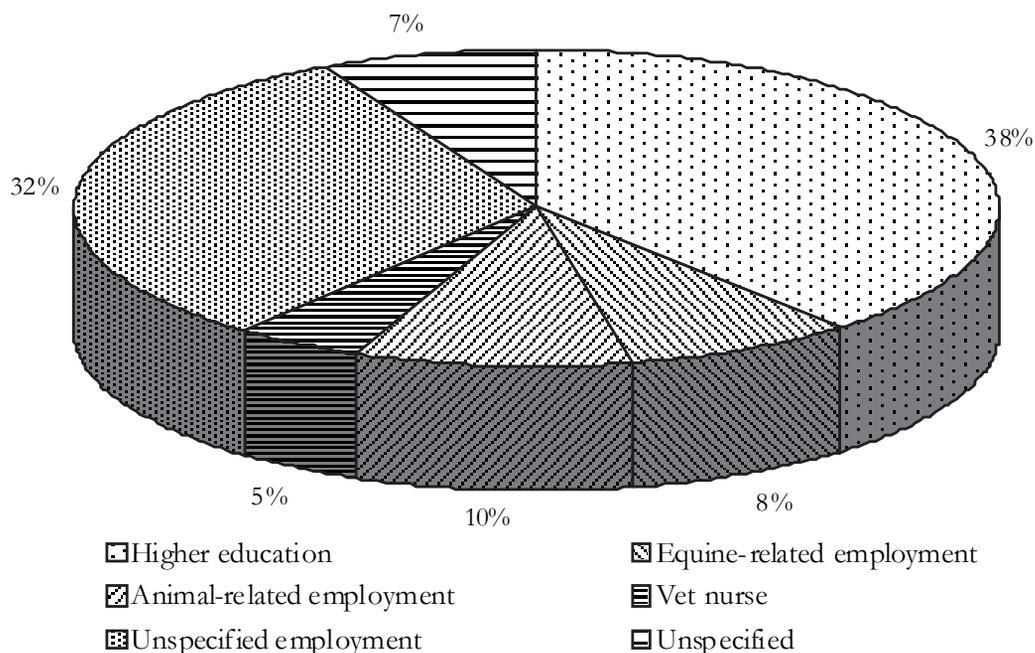
The questionnaires were circulated to FECs and HEIs delivering animal-related courses in the central England region: seven institutions participated in the study, three of which were FECs, with the remaining four delivering both HE and FE courses. The questionnaires were issued during a tutorial slot, and scripted instructions were provided to all tutors to ensure equivalent response conditions. Participants were assured of confidentiality of results. The questionnaire administration was followed by focus groups in some participating institutions.

Results

Comparison of participant groups based on progression aims

The differences between participants who were aiming to progress to HE and those who were not were explored using the statistical tests detailed in Table 1. Although previous researchers have treated GCSE grades as scale data (McDonald et al., 2001), the data sets in the current study showed some evidence of skewness and kurtosis (probably due to the restricted range) and so non-parametric analysis was employed.

Figure1: Progression aims of level three learners



The results show that there was no difference in academic, age or gender profiles of learners intending to progress to HE and those who were not. Learners who were intending to progress rated their current performance as similar to those who were not, but had significantly higher expectations of their course outcome ($p=0.02$).

Progression aims

The progression aims of the total sample are displayed in Figure 1. It can be seen that 38 per cent of all participants aimed to progress on to HE, 23 per cent aimed to progress on to employment relating to their current course, whilst 39 per cent had no clear progression aims.

Of those who were aiming to progress to HE, 90 per cent had applied, and 92 per cent of these had been offered a place. Of offers, 98 per cent were conditional on certain grades in their ND. The median offer was MMM/MMP (equivalent to 240/200 UCAS tariff points). Of offers, 83 per cent were for Merit (MMM) profile or lower.

We did not separate data into those aiming for different levels of HE course (e.g. FdSc (foundation degree)/BSc) due to insufficient data in each sub-group.

Learners aiming to progress to HE

Table 2 displays the median responses for those students intending to progress on to HE. The responses are to given statement relating to reasons for wishing to progress on to HE (ranging from 1: not at all important, to 7: very important).

It can be seen that learners rated interest in the subject and enhanced career prospects as highly important in their choice to progress to HE. Peer influence was rated of lowest importance.

Learners not aiming to progress to HE: their reasons

Table 3 displays the median responses for those students not intending to progress on to HE. The responses are to given statements relating to reasons for not wishing to progress on to HE (ranging from 1: not at all important, to 7: very important).

It can be seen that learners rated the need to get a job and earn some money as most important in their choice not to progress to HE. Peer and parental influence was rated of lowest importance.

Institutional effect

A chi-square test of independence was used to explore the progression aims of learners according to institution. There was a modest, but significant inter-institutional effect, $\chi^2(6, 169)=13.47, p<.05$. Inspection of the raw data suggested that this was largely due to a single FEC where none of the 13 learners were aiming to progress to HE.

Discussion

General progression aims

In this sample, 38 per cent of level 3 learners were aiming to progress on to HE. This is clearly higher than the 25 per cent quoted by Gittoes (2007), although the latter referred to all agriculture-related courses. This reinforces the previously identified need for more

Table 2: Factors affecting decisions to progress on to HE (self report)

Statement	Median response
I don't know what else to do	3
I'm interested in the subject and want to learn more	7
It will lead to better career prospects	7
It's what my parents want me to do	2
It's what my friends are doing	1

Table 3: Factors affecting decision not to go on to HE (self-report)

Statement	Median Response
I haven't really thought about it as an option	4
I'm not that interested in the subject any more	3
I need to get a job/earn some money	6
I think it will be too difficult	4
I want a break from college	5
My parents don't want me to	1
None of my friends are doing it	1

detailed breakdown of data according to subject (Sinclair and Connor, 2008). Vetnet LLN, in common with all lifelong learning networks, aims to increase progression opportunities for vocational learners. It would be misguided, however, to encourage learners to progress to HE if this is not an appropriate route for them: some learners may have made an informed choice to follow a vocational path, and may have a particular career in mind. This seems not to be the case in the sample, however, as 39 per cent had no clear progression aims.

There were no effects of age, gender or previous academic achievement on progression aims. Indeed the only demographic effect was an institutional one. This suggests that decisions to progress are to at least some extent affected by IAG and staff influences, either directly or subliminally. One FEC in the study had no learners aiming to progress to HE: this college has no current links with HEIs delivering animal-related courses. The focus groups revealed that learners studying on dual FE/HE campuses felt more confident about progressing: there seemed to be an additional barrier of moving location/institution as well as progressing to HE. Thus in addition to a review of IAG provided to learners at FECs, encouraging links between FECs and HEIs and the development of formal progression routes may help to break down the perceived barriers and ease the transition from FE to HE. As a result of this study, Vetnet LLN has funded a series of taster days at institutions offering HE courses in the region, to allow FE learners to visit the campus, interact with current students and get a 'HE experience'. Feedback so far has been very positive, but the real effects will be evaluated in terms of progression rates from these FECs in future years.

Although learners aiming to progress did not rate their current performance level any higher than those not wishing to so, they were aiming for better grades at the end of their course. Unfortunately we were not able to access follow-up data and therefore do not know in how many cases these aims were realistic. However, as there was no difference in GCSE grades for each group, this variation in aspiration is more likely due to self-confidence and motivation than to academic ability. There has been much recent interest in the effect of non-cognitive factors on academic achievement (e.g. Conard, 2006; Furnham et al., 2003). Indeed,

Furnham et al. (2003) suggested that students with low intellectual levels may compensate for their lack of ability by optimising or developing personality traits and learning strategies that contribute to academic success.

Factors affecting decisions to progress to HE

For those learners aiming to progress to HE, the reasons rated most important were: interest in the subject matter, and the fact that an HE qualification would enhance career prospects. This suggests that learners' motivations to progress have both intrinsic and extrinsic elements. It was at one time presumed that intrinsic motivation (the drive to pursue an activity simply for the satisfaction derived from it) was somehow 'better' than extrinsic motivation (pursuing an activity for external reward or to avoid sanctions). However, it is now accepted that not all educational tasks are intrinsically interesting, and that both types of motivation can have a positive influence (Ryan and Deci, 2000).

The least important reasons were claimed to be peer and parental influence. This is interesting as socio-economic factors have been known to affect learner choices regarding progression to HE (e.g. Gorard et al., 2006). It may be that these decisions are embedded within the learners and therefore not viewed by them as directly influential. Also learners may prefer not to quote these reasons. One of the WP criteria is that learners must be first generation entrants to HE. The current study did not request information about parental or sibling qualifications: it would be useful to explore this in further studies.

Factors affecting decisions not to progress to HE

Financial constraints were considered very important in making the decision not to progress to HE. Follow up focus groups revealed that learners were generally unaware of sources of financial assistance available to them. These learners also tended to focus on short term costs, whereas those intending to progress were more aware of their increased earning potential as graduates, and thought about more long term prospects.

Reasons stated to be moderately important were 'HE not considered as an option' and 'HE will be too difficult'. The former reason again implies that better IAG is required. The follow up to the Schwartz report (McCaig et al., 2008) identified that HEIs are still not publicising vocational qualifications as viable entry qualifications: information is often vague and ill-defined and requires learners to contact the institution for clarification. Barry Shearman (2009) commented that until IAG for all was made mandatory, then institutions would not see it as a strategic priority.

The Vetnet LLN funded HE taster days aim to contribute towards redressing this balance. HEIs hosting these taster days have been encouraged to agree formalised Progression Accords with sending FECs.

Learners who perceive HE as too difficult may be suffering from lack of self confidence, or could be negatively influenced by tutors or parents. However, it may be that some of these learners are simply being realistic about their own academic ability. Bailey and Bekhradnia (2008) showed that vocational learners progressing to HE underperformed compared to their peers from traditional backgrounds, a finding that was confirmed by Huws and Taylor (2009) in a study which looked specifically at degree outcomes of graduates from animal-related courses. Bailey and Bekhradnia (2008) further found that vocational learners were more likely to change from their full-time first degree course onto either an equivalent part-time or sub-degree course. They were also more likely to be inactive one year after commencing their studies. This highlights that vocational learners need the right advice regarding progressing on to HE, and may also need additional support in making the transition.

Summary and conclusions

The study demonstrated that vocational learners in animal-related subjects do perceive barriers to progressing to HE. Some of these barriers may be based on realistic self assessment of their own academic ability. However, it seems that for some learners, decisions are not fully informed. Key to learners' perceptions of their likelihood of progression will be: 1. their awareness of the opportunities and benefits that higher education can confer; and 2. their aspiration towards HE, both of which can be influenced by appropriate specialist IAG.

In addition to providing clearer guidance in their marketing materials and entry profiles, Vetnet LLN encourages its partner institutions to be more proactive in attracting and retaining vocational learners through the introduction of taster days, bridging courses, buddying and mentoring schemes. National initiatives include a subject-specific web based course search tool featuring job profiles and success stories of former vocational learners who have progressed on to HE and beyond. This is supported via a Facebook fansite which allows learners to interact within familiar territory. We will evaluate the success of these ventures in the future.

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