

Attracting the right students to University courses

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Abstract

Getting accurate course information in university prospectuses is crucial. Here, we argue that if the prospectus descriptions about a particular course do not match the actual experiences of students on that course then they may feel demotivated and perhaps even drop out, at considerable cost to the department. Our study shows that when applicants decide whether to study their discipline at a particular institution, they consider how the information presented in the prospectuses matches their personal goals for study. We found that the way a course is described in a prospectus has an important influence on the choices of the student. Finally, we suggest how prospectus entries can be improved so that descriptions of course information match actual student experiences on a course. Geology is used as a focus discipline for part of this study.

The importance of personal goals in learning

When an undergraduate course does not live up to expectations, the results can be alarming. Students may drop-out, fail or develop a negative approach to learning. This problem is compounded by the fact that many students enter Higher Education with a poor idea of what is involved in their future studies.

When students fail or drop out of courses, the financial and psychological costs to them as undergraduates can be substantial. Student wastage is expensive for university providers too, and a high wastage rate can damage departmental reputations. Students who survive but under-perform waste their own time and resources, often become demoralised, and can demotivate other students and the academics who teach them.

The most common reason for dropping out of university is a lack of commitment to a chosen field of study (Yorke, 1999). This occurs when personal goals for learning are not met by the principles and objectives of the discipline and course students have chosen to study.

School motivation versus university motivation

The dramatic difference between secondary school and university culture is often blamed for the under-performance of first year students at university (Rickinson and Rutherford, 1995). Secondary education is characterised more by a 'spoon-feeding' ethos whilst Higher Education (HE) requires more independent learning (Wankowski, 1991).

Personal goals for learning are understood to include any goal that implies an expectation that knowledge will be used in some future scenario. Examples include career goals ("I want to become a stress engineer"), and goals for personal development ("I want to become good at formulating an argument"). School leavers who choose science, engineering and technology subjects are thought to give much less consideration than older students to clarifying their personal goals (Yorke, 2000). With somewhat undefined personal goals, these students have little to go on when choosing a course and are more likely to make the wrong decision.

When considering Higher Education, students are put under pressure to think, perhaps for the first time, about why they should learn. From the student perspective, this means that they must take responsibility for setting their own educational goals. Students also need to consider what demands might be made of them at university and whether these are compatible with their own motivation for going to university in the first place.

Critical decision-making

The most critical time when students must think about their motivations for learning is when they make their applications for University undergraduate degree courses. There is now such a wide range of choice

in the Higher Education market that this critical decision is an increasingly hard one for applicants to make. Making the wrong choice, however, could have severe consequences. When student experiences do not measure up to their expectations, it is harder for them to reap rewards from the effort they put into their studies, because their efforts are ill-directed (Breen and Lindsay, 2002). Motivation then begins to dwindle and students can give up (Tinto, 1993).

According to Anderson (1999), there are three key institutional factors that help students to refine the number of courses from which they choose. These are:

- reputation/status
- social life
- location

Academic departments have little or no control over how students choose with regards to these factors. The only remaining factors identified by Anderson (1999) over which departments do have some control are (a) the course content and (b) the employment prospects associated with the course. This information is widely available in University prospectuses and, indeed, prospectuses are the most influential source of information on student decisions about what course to take at university, according to the Institute for Employment Studies (Conner et al, 1998). Not surprisingly therefore, universities commit large sums of money and time to the production of prospectuses.

Good quality prospectus information depends on good market information about the needs of the students that departments want to attract. Accurate, and up-to-date information about courses is important, given the degree of weight placed upon prospectuses in student decision-making. It is through this kind of promotional material that departments can crucially influence whether a student makes a good informed choice, or a bad misinformed one.

The Research and Procedure

The research reported in this paper grew out of a desire to understand some of the motivations that lead typical University applicants to choose a particular degree programme. Although it is known that interest in the programme is an important predictor of choice (e.g. Aldosary and Assaf, 1996; Anderson, 1999 and Slee, 1996), the psychological processes that actually underlie choice behaviour are not well understood. It is thought, however, that the processes involve the formation and re-formation of personal goals through an assessment of the available information at the time of application (Medin and Bazerman, 1999).

Prospectus statements from various degree programmes at different institutions provided the research material for this study. The data accumulated were used to answer two separate questions, viz:

Question 1. Do university applicants choose degree programmes that present prospectus information relevant to their personal goals?

In other words, do students make a rational choice about which degree programme to study based on personal preferences and the prospectus?

Question 2. If so, how well does an institution's prospectus for a particular course match the personal goals of the students currently studying on that course?

In other words, do student perceptions and expectations about a course match their actual experience on the course?

115 students at all levels of undergraduate study in Economics (n=25), History (n=29), Geology (n=30) and Psychology (n=31) at one institution (university 'a') agreed to take part in this study. All students were asked individually to read a selection of randomly presented statements taken from the university 'a' prospectus, together with a selection of other prospectus statements taken from three other institutions also offering

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programmes in Economics, History, Geology and Psychology (universities b, c and d), and then to rate how relevant they thought they were to their own personal goals. Geology students were only asked to rate statements pertaining to Geology courses and Economic students were only asked to rate statements from Economic courses etc. It is important to state that in presenting the random list of prospectus statements to the students, none of the institutions were actually named, and they were simply labelled as university 'a', 'b', 'c' and 'd'. For example, Geology students did not know whether any one prospectus statement actually came from their own institution's Geology prospectus or from another institution's prospectus. The statements were therefore presented 'blind'.

Participants were asked to rate each prospectus statement pertaining to their particular discipline for its relevance to their personal goals on a scale of 1-7. A rating of 1 denotes that the statement is "not at all relevant to my personal goals", 4 = "neither relevant nor irrelevant to my personal goals" and 7 = "very relevant to my personal goals".

The same cohort of 115 students from institution 'a' were also asked to choose which course they would, hypothetically, want to take from the four institutions 'a', 'b', 'c' and 'd'. Students of Geology were obviously asked only to consider sentences from prospectus entries for Geology courses and to choose between only Geology courses. Likewise, Economics students were only asked to evaluate sentences taken from Economics prospectus course entries etc. Although participation was voluntary, the incentive of entry into a prize draw for cash prizes was offered. This proved to be successful!

Results and Discussion

Question 1. Do university applicants choose degree programmes that present prospectus information relevant to their personal goals?

The analysis employed for this part of the study was a linear regression model, using the average relevance rating of all prospectus statements for each university and for each discipline, across all students as the independent variable (x) and the frequency of course choice as the dependent variable (y). Table 1 details the average relevance rating given to each of the four institution's prospectuses, by discipline.

| Institution | Economics | Geology | History | Psychology |
|-------------|-----------|---------|---------|------------|
| a | 4.6 | 4.4 | 4.5 | 4.9 |
| b | 4.6 | 4.5 | 4.3 | 5.0 |
| c | 4.2 | 4.5 | 4.5 | 4.9 |
| d | 4.2 | 4.4 | 4.4 | 4.2 |

Notes: low relevance = 1, high relevance = 7

Table 1: Average relevance ratings given to each of four prospectuses (institutions a, b, c and d) by students in each sample population.

The resulting R² value was significant (F = 5.27, df = 1, p = 0.04), demonstrating that the probability of the result occurring is significantly greater than chance alone. Furthermore, the regression model explained approximately 30% of the variance. Whilst this does not appear to be substantial, it is worth noting that a single psychological predictor of behaviour rarely, if ever, explains this much of the variance in course choice (usually it would take several predictors to reach this percentage of the variance). When these results are compared with previous studies of choice behaviour, relevance is the most successful factor in explaining variation in choice. (e.g. Anderson, 1999; Aldosary and Assaf, 1996; Slee, 1996; Feather, 1992; Lent et al. 1991). So, it would seem that students in this study do make some sort of rational choice between degree programmes based on prospectus statements relevant to their personal goals. This would appear to apply to all disciplines used in this study, including Geology.

As we have shown that to some extent student choices of degree programmes are influenced by prospectus statements and how these match (are 'relevant to') their own personal goals, it is therefore important to ascertain whether such prospectus statements which initially drew students onto the course, actually match student experiences. In other words, do prospectus statements appear to be accurate predictors of what the course is actually like? This forms the basis of the second research question.

Question 2. How well do an institution's prospectus statements for a particular course match the personal goals of the students currently studying on that course?

For this part of the paper, we focus on just the Geology student relevance ratings for the benefit of PLANET readers.

Geology student relevance ratings for the prospectus entry pertaining to the institution they were actually attending (institution 'a') were extracted from the whole data set for further analysis. Since all of the students who participated in this study were undergraduates at institution 'a', it would be worrying if many of the statements made about the course in the Geology prospectus did not actually match the experience of those studying on the course itself. In other words, it would be concerning if there was a disparity between pre-enrolment 'student expectations' and 'actual student experiences' on a particular course. (Note that it would obviously not be meaningful to carry out the same analysis on the other prospectuses since the participants in the study were not actually attending any of the other universities.)

Table 1 shows that on average, Geology students found the prospectus statements about their course at institution 'a' to be of relevance (a mean relevance rating of 4.4). This is at least moderately encouraging and goes some way to showing that the students on the Geology course at institution 'a' still find the programme relevant and matching their personal goals. So, it is unlikely that there is serious cause for concern. However, it is interesting (and perhaps surprising) to note that overall Geology prospectus statements from institutions 'b' and 'c' were of slightly more relevance to these same students (4.5). It is therefore useful to ascertain whether there are any statements in institution 'a's' prospectus that caused the comparatively lower rating of relevance.

If actual student experiences do not closely match their pre-course expectations, it could be that the course prospectus is making false claims about what students can expect to experience on that course. However, it is more likely that the particular statement is not expressed in a way that reflects how students actually experience the particular course element to which the statement refers. So, the statement could be improved so that it more accurately describes the student view.

Therefore, a final part of the research was to ascertain whether there were any particular prospectus statements which the majority of students rated 'high' or 'low' in terms of relevance to their personal goals. Such an analysis allows one to find out if certain prospectus statements are particularly important or alternatively irrelevant to the students currently on the course. Assuming that the current student population is statistically 'normal' and representative, such an investigation may help to determine the future content of prospectus statements.

The Geology students in this study had a wide range of opinions (in terms of relevance ratings) on how well the sentences in institution 'a's' prospectus actually matched their personal goals for studying there. This reflects the diverse range of interests of the current students with respect to individual Geology prospectus statements. On only 4 of the 72 sentences presented about institution 'a' were the students in general agreement with each other (all student relevance ratings being very similar). These four questions were uncovered using tests for skewness. Three of the four sentences described how the Geology course emphasised the

development of field skills in students. Most Geology students found these statements to be 'highly relevant' to their personal goals. There was also a fourth statement, detailing students' employment prospects that all the students agreed on and in this case, perhaps surprisingly, found to be less important to their personal goals.

Conclusions

It would seem from the results obtained in this study, that students do generally make a rational decision about what course to take using discipline-specific prospectus statements. This highlights the importance of producing clear and transparent publicity material when marketing university courses. However, academic departments may find it useful to assess how well their current prospectus statements match their actual student experiences. The example provided from the Geology prospectus entry for institution 'a' indicates that information about field mapping is actually highly relevant to most students taking the Geology course. On the other hand, (perhaps surprisingly), most students in this study do not appear to find the information in the prospectus on career prospects to be particularly relevant to their personal goals. Helping to match student expectations with student experiences through clear and accurate prospectus statements may go some way in reducing drop-out rates. Evaluations like the one reported in this paper may assist in improving the accuracy of future prospectus statements, by relaying course information in a way that makes the statements more relevant to students' personal goals.

The consequence of irrelevant or misleading information in prospectuses is that students may choose badly. The financial costs of student drop out to universities should be an incentive to improve prospectus design. The costs to the individual student, which include financial costs, damage to self-esteem, confidence and commitment to their personal goals, should also be an incentive to improve. However, Higher Education's responsibility for student choice does not stop there. On arrival, students also need help finding an area of the curriculum that reflects their life and career goals (Attinasi, 1989). Indeed, a great deal of student development in defining their personal goals will occur after they enter HE.

Recommendations

Two specific recommendations arising from this work are:

1. Make sure that future prospectus statements about a particular course reflect the current experiences of the students on the course.
2. Regularly review these prospectus statements so that they are up-to-date and therefore more likely to be relevant and to attract students who will not drop-out due to a mis-match between their expectations and their experience.

Other information

An article on this topic has been submitted to the *British Journal of Psychology* entitled "Knowledge-dependent motivation in learning and choice behaviour".

A poster presentation at the American Educational Research Association's annual conference 2002 (New Orleans) has also been delivered.

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