

Factors affecting attrition and retention of remote higher education students

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ABSTRACT: In 1987 some staff at the University of Tasmania, reported on a project examining the reasons cited by students for their withdrawal from distance education courses. For four semesters, during the period 1983 to 1985, students who withdrew from distance education courses were sent a questionnaire designed to elicit from students reasons which they thought contributed to their withdrawal. A follow up study was begun in 2003 and continued until the end of 2004 to see if developments in the intervening 18 years, such as the advent of online learning, have impacted significantly on the retention and attrition of remote higher education students in Tasmania. The results for the second study show surprising similarities to those of the previous. The research has also revealed some interesting developments such as changes in the motivation of students and changes in students' perceptions of the efforts of the university in assisting retention.

INTRODUCTION

A higher attrition rate for distance education students compared to on-campus students been an acknowledged phenomenon since distance study began to be offered by higher education institutions. Australian research confirms there is a propensity for students studying at a distance to drop out. A longitudinal study by Urban (1999) of students initially enrolled in 1992 and whose progress was tracked until 1997, showed that almost 67 per cent of full-time on-campus students and 47 per cent of part-time on-campus students completed a course by 1997. However, only around 37 per cent of external students completed an award by the end of 1997. The adjusted results also indicated that female full-time students complete at nearly three times the rate of external students. Full-time male students complete at twice the rate of external students (Urban, 1999).

This phenomenon of distance student attrition has certainly been recognised at the University of Tasmania for some time. In the 1980s some staff at the University of Tasmania at Launceston (Osborne, J., Kilpatrick, S. and Kember, D) conducted a project examining the reasons cited by students for their withdrawal from distance education courses. The project was reported in 1987. Recently a similar study was conducted at the University of Tasmania and this second study returned similar results to the first.

Studies have often pointed to the necessity of some degree of 'social presence'(Gunawardena & Zittle, 1997) for distance education to work. Many technological developments such as email, video-conferencing and increasingly sophisticated software for on-line course provision, have been promoted as having the potential for increasing social presence. But despite universities utilising this technology, attrition remains significantly higher among remote students compared to internal, full-time students. The studies summarised in this paper show why this might be the case, as while social presence is no doubt important, the vast majority of students cite reasons for withdrawal not easily influenced by institutions themselves, reasons such as family and work commitments and changes, and other factors external to the student's relationship with the University.

FIRST STUDY – 1980s

The first study used a survey methodology whereby a questionnaire designed to elicit from students reasons which they thought contributed to their withdrawal. This type of study is sometimes called a 'post-mortem study' in the literature. Statements relating to possible reasons for withdrawal were compiled after a detailed literature survey. The statements were circulated to external studies unit staff and the student counsellor for additions and modifications. The process resulted in a forty item questionnaire using Likert scale responses. The items were arranged in random order. In addition there were two open-ended questions designed to draw out any reasons for withdrawal not covered by the statements.

The questionnaire was sent to students who formally withdrew from external units during semester two 1983, semester one 1984 and semester one and two 1985 and following four semesters of experience with the same withdrawal questionnaire, an improved version of the questionnaire was used in semester 1, 1986. In total 391 questionnaires were mailed, and 272 useable questionnaires were returned. As well as questions relating to their reason for withdrawal, students were also asked some questions about their experience while studying as an external student at the University.

SECOND STUDY 2003-2004

The second study also used a survey methodology involving a number of questionnaires. The questionnaires were based on previous studies of the retention of distance education students, including the first study undertaken by Osborne, Kirkpatrick and Kember (1987) but also included some elements of a subsequent study by Kember (1995) and from more recent studies such as those of Woodley (2001), Kennedy (2001) and Yorke (1999). Several new questions pertaining specifically to the Tasmania situation were formulated using a focus group of University of Tasmania staff. The second study's questionnaires were more comprehensive than the first with around two hundred different questions being asked (with a maximum of 57 per questionnaire).

In contrast to the first study, in the second, a group of 425 identified remote¹ students were asked to participate. Two hundred and ten volunteered. Of this number, one hundred and twenty two withdrew. All returned questionnaires from these students were usable. The study took place over four semesters spanning two academic years - the first and second semesters of 2003 and first and second semesters of 2004. This second study was a panel study in that the same group of students was tracked for an extended period, and unlike the first study, data was collected from students who continued and graduated as well as those who withdrew. Whereas, the first study concentrated exclusively on the reasons for withdrawal, the second study included

¹ The University of Tasmania no longer formally makes a distinction between on-campus and external students. However, some students are identified as 'remote' for the delivery of additional services, some units are offered in flexible delivery mode and some have support from an external studies unit.

very similar questions about the reasons for withdrawal to the first, but also included a number of demographic, attitudinal, and circumstantial questions, which are not discussed fully here. Results of the study pertaining to the students who did not drop out will be reported elsewhere – these results constitute a test of a model of attrition in distance education developed by Kember (1995) and need to be dealt with at length.

COMPARING THE TWO STUDIES

The sample size was greater in the first study as the researchers were able to access the University's database and send questionnaires to all withdrawing students, obtaining a sample of 272. In the second study the sample was smaller because there was a degree of self-selection – only around half of the possible subjects opted in (leaving 122 students who withdrew, 47 who were still studying, 34 who completed, and 7 who had deferred or opted out of the study). This disparity needs to be taken into account when comparing the percentage results between the two studies. Table 1 below shows the primary reasons for withdrawal cited by students who withdrew.

The two predominant reasons for withdrawing given in the first study – family and work - remain the most commonly cited reasons in the second. The principal reasons that show some variation between the two studies are 'wrong choice' – where double the number of students felt they had selected a course that did not suit their abilities, interests or aspirations in the second study compared to the first, 'administrative problems' where far fewer students as a percentage felt issues such as incorrect mailings and enrolment errors on the part of the University caused them to withdraw in the second study, and 'problems with course materials' had almost disappeared as a reason in the second study. A discussion of the reasons for such changes must be based largely on conjecture, but such a discussion is useful because the major change occurring between the two studies at the University of Tasmania, in a distance learning context, is the advent of online learning, and this would have to be seen as the most probable cause for any differences.

Table 1: The primary reasons for withdrawal given by students as a percent of all withdrawing students.

CATEGORY	PRIMARY REASON	FIRST STUDY	SECOND STUDY
EXTERNAL, TIME RELATED	Employment demands/changes	24%	23%
	Family demands/changes	25%	22%
	Other personal constraints/changes	5%	7%
	Lack of Computer Access	na	4%
PERSONAL	Study Skills/Computer Skills	10%	13%
	Wrong Choice	3%	6%
	Problems from late enrolment/start	2%	0%
	Lack of motivation	2%	7%
UNIVERSITY	Administrative problems	6%	3%
	Problems with course materials	8%	1%
	Poor quality of teaching support	9%	5%
	Difficulty/workload of course	6%	9%

External, Time and Circumstance Related Factors

In both studies external and time related reasons were the main ones given for withdrawal by students. In the first study time pressures or unexpected changes in work or family circumstances were cited by approximately half of the students (54%). The open-ended questions in the 1980s survey also contained numerous related responses. In the first study, the researchers warned that full credence should not necessarily be given to these statements because of the assertions of attribution theory (Weiner, 1985) meaning that generally, people take credit for their own success by explaining these successes as due to their own personal endeavours. On the other hand failures are invariably attributed to external factors beyond their control.

In the second study, fifty six percent of all students cited pressure of work, family or other external constraints as their main reason for withdrawal. However, the idea, as propounded in the findings in the 1980s, that attribution theory accounted largely for

the significant proportion of students citing external factors, needs to be revisited in light of the second study. This is because the second study also questioned the continuing and completing students about their experiences. A similar proportion of these students also cited work and family commitments as being very difficult to balance when studying. Some of these students described external occurrences that could only be characterised as dire, yet they still kept studying. So it might not be that unsuccessful students look for excuses to cover up their own failure (and family and work are the most convenient targets), but rather most students have very real issues with balancing family, work and study, but some just cope better – they are either more resilient or receive vital support from other quarters such as spouses or lecturers.

Since the first study, there has been a minor increase in students citing other changes or personal constraints such as financial or housing problems. A possible explanation for the increase evident from the research was that the sample of the second study contained a high proportion of un-partnered women with children (27%), who also tended to make up the lowest income group. Unfortunately such demographics were not recorded in the first study, so a substantiated link cannot be made. Also, in the second study, lack of access or difficulties in accessing a computer was also a reason occasionally cited. In the first study this was not such an issue as only one unit – Computing - required access to a computer, and even for this unit the University did not expect students have their own computer. The first study did not have a specific question on computer access, although, a few students mentioned that getting access to a computer in a computer centre for the required six hours was difficult.

Personal Factors

Both studies included questions related to students' perceptions of the study skills necessary for the successful completion of an external course. The issue is a significant one because a high proportion of external students are mature entrants who either lack the normal entry qualifications or completed their schooling several years prior to commencing study. In the first study in the 1980s, eleven percent of students had attended a study skills course before the semester, and a further thirty percent said such a course would have been useful. Fifty-seven percent said they found it difficult to organise their study time to fit in with the requirements of the unit. Thirty-nine percent had to devote more than the advised 10-12 hours per week to a unit. In the

recent second study, twenty nine percent of students had undertaken a preparatory course of some sort. Almost all said that the course had been of value (even though they later withdrew from their award course). An interesting finding was that those who completed a preparatory course were much less likely to give a reason blaming the University for their withdrawal. Perhaps these students had the perception that the University had provided adequate assistance, and their failure to complete must be attributable to some other factor. Conversely, the group who had not completed a preparatory course were much more likely to give several reasons, including one blaming the University and some other factor such as lack of time. Table 2 below gives the percentages of students in the two groups. This shows there was a definite difference in the reasons given by students completing a preparatory course compared to those who did not. Only five percent of the students taking a preparatory course gave reasons implying the University caused their withdrawal. This compares to twenty two percent for those who did not do a preparatory course.

Table 2: Second Study: Percentages of responses by category for sub-sets of students depending on preparatory course completion¹.

	University	Personal	External
Prep Course ²	5%	41%	54%
No Prep Course ³	22%	30%	48%

¹ Reasons categorised as in Table 1 above (NB many students gave more than one response).

² Percentages of reasons given by students who attended a preparatory course given by the University using the categories in Table 1.

³ Percentages of reasons given by students who did not attend a preparatory course using the categories in Table 1.

In the second study fifteen percent of students thought they lacked the computer skills required to be successful in the course when they started, and four percent cited lack of computer skills as the major reason they withdrew. In the open ended questions on the questionnaires in the second study it was clear that the level of computer skills required was a surprise to many, especially mature age students. In the first study computer skills were not an issue as all units except ‘Computing’ did not require the use of a computer.

In the 1980s study, comments in the open-ended questions suggesting students who started study late, either because of late enrolment or unavailable textbooks, had difficulty catching up. While only a small number (2%) gave late enrolment as the primary reason for withdrawal, eleven percent of respondents said they had enrolled late and found it difficult to catch up. In the second study late enrolment was not an really issue because the enrolment process is now comparatively rigid and standardised, and late enrolments are usually discouraged or penalised. However in the open questions a very small number (3) students did note that they had to start their study late for personal reasons and this meant they found it difficult to catch up.

A small number of students in both studies said they had made the wrong choice in their selection of study. However, in the second study the percentage was double that of the first study. Examining the responses to related questions did not shed any light on why this is the case. It could be supposed that more choices mean a greater likelihood of getting it wrong, or perhaps the University is taking students' background knowledge of newer disciplines too much for granted. Perhaps related to this difference is the change in the number of students citing a lack of motivation from the first study to the second. In the first study this reason was one of the least cited, yet in the second the number of students saying they were not motivated enough to finish the course more than tripled (up from 2% to 7%). Curiously, from the content of the open ended questions many students seemed to feel that it fell to the University to ensure they remained motivated.

University Related Factors

In the first study students did not generally view the quality of course materials as an area of high concern, and many gave positive comments about the quality of course materials. At the time all external units had materials compiled with the assistance of the external studies unit. However, it was noted that over 20% of students claimed the course materials assumed knowledge they did not have. In the second study students seemed generally happy about online course materials and were very happy with materials in the small number of units still coordinated by the external studies unit. There were some concerns regarding reading material online – particularly eReserve texts, with many saying the files were too large to download over their dial-up

internet connection, and some even found that WebCT could cause problems with comments such as: *'I found due to my location it was frustrating – graphics take forever to download and time is far too precious for that'* not being uncommon.

In the first study, twenty-six percent of responses said essential textbooks were not available at the start of semester, but the vast majority (91%) of students found the textbooks were useful and suitable for the unit when they were available. Around twenty percent of students in the second study made adverse comments about the availability of textbooks. Many students in the second study expected not to have to buy textbooks as the University should provide enough copies on reserve in the Library. This perhaps reflects the rampant inflation in the price of textbooks over the last 18 years as much as an attitudinal change. Many students in the second study also lamented the inability to have bookings on library materials in advance as they wanted to be certain that materials would be available when they travelled to the University. However, remote students were in general happy with the Library's service with many (89%) saying that the Library provided an adequate service, and some (15%) volunteered praise of the Library's service. Interestingly, students who could not visit a campus at all were the most complimentary towards the Library's service.

In the first study a considerable percentage (31%) of students was annoyed by late and incorrect mailings, although only six percent said administrative problems such as late mailings were the primary reason for withdrawal. In the second study, late mailing was not a significant issue, with only one percent citing this as a problem. The three percent of students who did give administrative problems as their main reason for withdrawal, gave either examples of unit availability or financial dealings with the university as problems. In the second study, eighty three percent of students had positive comments about administrative staff or procedures. No doubt the small amount of material now being mailed is the main reason for the decline in the numbers of students citing this area as problematic.

In the first study while only a relatively small number (9%) cited poor quality of teaching support as their primary reason for withdrawal, many of the other responses

indicated that there was some unhappiness with the level of teaching support at the University, with many (80%) students expressing the desire for more tutorials or other face-to-face contact. Although a similarly large proportion (70%) found tutorials useful. In the second study, lack of opportunities for contact with staff was not such a significant issue (although lack of opportunities for contact with other students was often mentioned). A small number of students named individual lecturers as difficult to contact or get an email reply from.

In the 1980s, students when asked about feedback in general, expressed a low level of satisfaction. This was reinforced by the number of students suggesting an improvement in feedback support from teaching staff and markers, and by the fact that over a quarter of students expressed disquiet at the speed of assignment return. In the recent study just under twenty percent of students said they thought assignments were returned too late. From the comments made by students in the open ended questions in the second study, it seems that assignment feedback is a major factor in their interaction with the University and a lack of feedback makes some consider if it is worth embarking on their second assignment if they have no idea how they did on their first.

COMMENTS AND CONCLUSION

In light of the findings of the two studies can universities do anything to further reduce attrition? One could conclude from the results – not very much - as the consistently most often cited reasons for withdrawal, family and work commitments are largely outside the influence of the university. However, it would seem that new technologies introduced by institutions such as course delivery software like WebCT and the use of electronic communication has had some impact. In the 1980s before this technology became widely available, the mailing of materials, lack of opportunities for communication with lecturers, and the unavailability of texts were significant problems faced by distance students at the University of Tasmania. Since the introduction of ICT into course delivery, these problems have receded markedly. However, while these new technologies have ameliorated some problems it has also created some - computer access and the need for computer skills have emerged as issues. These may only be transitional problems, as current cohort of mature age

students moves through the system and a new generation of computer literate students fills the places of current remote students.

Information and Communication technologies are clearly not a cure-all. Some aspects of remote learning remain uninfluenced by ICT. It would seem that technology is not helping academics mark and return assignments any quicker, and preparatory courses offered face to face remain highly valued by students. The two studies also show that students often underestimate the time required and the impact of studying on their home and working lives. Marketing material for courses needs to be balanced with frank and realistic information about the workload and expected prior knowledge. Pre-enrolment counselling should be considered by all schools offering online units.

These two studies do not give any insight or explanation for the reasons why some students withdraw and some complete. It establishes that external factors are the primary reasons cited by students, but almost all remote students have a myriad of family and work pressures. To have a real impact on improving retention we need to better understand the characteristics, strategies, and social/study integration techniques of successful remote students. Perhaps universities could then foster some of these techniques in all their remote students. As external factors cause so much attrition, fostering just a small increase in the resilience of students could have very positive effects.

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