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SEVEN YEARS AT THE COAL-FACE: THE RETENTION PHENOMENON THROUGH THE LENS OF A YEAR TUTOR.

DENNIS JAMES DUTY

A thesis submitted to the University of Huddersfield in partial fulfilment of the requirements for the degree of Doctor of Education

October 2011-08-18

DEDICATION

For Harry Dennis White Duty (1933-2011)

"I have been impressed with the urgency of doing. Knowing is not enough; we must apply. Being willing is not enough; we must do"

Leonardo Da Vinci (1452-1519)

ABSTRACT

Each year in higher education institutions around the world millions of people embark on degree level study. Unfortunately many of these hopefuls, for whatever reason, fail to progress to their second year of their course. This phenomenon transcends national boundaries, and yet despite over 80 years of research, and significant investment in programmes, there remains little evidence of any sustained, systemic or operational improvements in retention performance.

Just such a problem existed on the first year of the full-time business programmes at the University of Huddersfield. In 2002 and 2003 it was found that on average nearly 30% of students did not progress into year 2. This was the catalyst that initiated a seven year investigation of retention covering the academic years 2002-2009. It led to the establishment of two key objectives, firstly to establish the nature and incidence of student non-progression to year two, and following on from this to endeavour to investigate how the rate of non-progression could be reduced.

The research approach taken in this thesis is a departure from traditional retention research in that it is practitioner based, i.e. it is research by an insider, in this case a year tutor. Working within a realist framework a pragmatic stance was taken, combining elements of action research to investigate the case of the first year of a business studies undergraduate programme in post-92 university. Two key episodes characterise the project, the first covering 2002 and 2003 involved the establishment of effective retention data systems and the second covering 2004-2008 involving a period of systemic intervention. Seven consecutive years of consistent quantitative and qualitative data collection and observation allowed for the construction of a detailed picture of retention. It also facilitated the effective evaluation of the subsequent retention solutions that were implemented.

Over the period of the study 174 out of 753 students failed to progress to year 2. These 174 students could be classed into one of two non-progression categories: those who withdrew before the end of the academic year and those who did not withdraw but still failed to progress. Individual student withdrawal behaviour was unique and highly complex, but three types of withdrawal were identified, early leavers, late leavers and circumstantial leavers. Despite the strong interventionist and supportive policy, students identified as having problems would often actively avoid contact with the institution.

Identification of the nature of student failure to progress provided a guide for potential solutions. Three general approaches were deployed: early intervention and engagement, academic skills support and institutional change in the form of teaching. Early intervention was an ongoing process and served to enable and support the key process of data collection and student-faculty contact. Academic skills support was shown to have an impact on individual student performance but its effect on retention was difficult to identify because of the need to control other variables. It was found that this type of retention programme tends to speak to students who have the relevant cultural capital or who are highly motivated and those deemed at risk are unlikely to make use of the service, a concern for all considering that the bulk of retention programmes follow this pattern.

Institutional change was effected by changing the teaching delivery method and moving away from classic lecture structures to small groups. It was observed that students with lower UCAS entry points tended to benefit more under the seminar system, but it also proved to be effective in increasing student class attendance and the performance of all students. Furthermore the incidence of student academic failure was significantly reduced thus contributing to higher retention levels.

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GLOSSARY

Organisations and bodies

ACT	American college testing programme
AERA	American Education Research Association
EU	European Union
HESA	Higher Education Statistics Agency
HEFCE	Higher Education Funding Committee for England.
NAO	National Audit Office
NA	North America (Canada & US)
UCAS	Universities and Colleges Admissions Service
UGC	University Grants Committee
UK	United Kingdom
UoH	University of Huddersfield

Terms

ASS	Academic Skills Support
F2F	Face-to-face
FTP	Failure to progress
HE	Higher Education
NC	Non-completion
NT	Non-traditional
PC	Post compulsory
SAM	Student attrition model
SEG	Socio-Economic Group
SIM	Student interaction model
SI	Suplementary instruction
WP	Widening participation

Module Key

AC	Accounting for Managers
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- MG Market and Government (formerly Economics)
- MI Managing Information (Formerly Quantitative Techniques)
- IB Introduction to Business
- **OP Business Operations**

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PROLOGUE

In 2002 I was appointed as Year One Tutor for the full-time undergraduate business courses, and this coincided with the emergence of the retention issue within Higher Education (HE). Within the United Kingdom (UK) it has subsequently become the focus of an increasingly concerned and diverse research agenda as institutions struggle with the consequences of widening participation. This is not a new phenomenon though, and the volume of research emanating from North America (NA) is testament to the importance attached to this issue. Researchers from many perspectives and disciplines have frequently investigated retention, educationalists, psychologists, sociologists, economists and many more both inside and outside of academia have at one time or another commented on the phenomenon. Whilst providing potentially interesting and new perspectives on retention, most of this research takes an "outsider" view of what is universally considered to be, an extremely complex social phenomena. There remains scant research from front-line academics that are in close and continued contact with students, particularly those holding office bearing titles such as 'year tutor' or 'course tutor'. For those who work at the coal-face and that have responsibility for student welfare (both academic and pastoral) as part of the function, the retention phenomenon is ever present.

From a personal perspective (and I would imagine this resonates with many who are year tutors or course leaders) the task has consumed a large part of my working life. In 2002 26% of students who enrolled on the undergraduate business courses did not pass the required assessment that allowed progression onto year two, and in 2003 this rose to 33%. Clearly there was a problem here and this was the catalyst that started me on a seven year journey, initially to identify the causes of poor retention, but subsequently to endeavour to improve retention. At this early stage I approached the task very much as I had my past positions in operations management in industry. A key part of managing operations was the collection and collation of performance data in order to inform decision making, and making interventions based on that data in order to maintain and improve efficiency of the system. This was my departure point and this perspective, coupled with my close proximity and intimacy with the phenomenon placed me in a rather unique position to investigate retention. This has provided me with something that has hitherto been absent from the research on

student retention, and that is a complete picture of the problem as it occurs at an operational level over an extended period. Being close to the action has provided me with a fertile environment in which to interact with students, collect various types of data and make the operational interventions necessary to improve retention. In particular the daily interaction with students has allowed me to build a strong relationship with each of the seven cohorts, and this has facilitated the collection of both useful qualitative data but also context sensitive, accurate, and reliable quantitative data.

This thesis then is an account and analysis of the seven years from 2002 to 2009 and is structured around seven chapters. Chapter one presents the context of Higher Education and establishes the nature of contemporary pressures on institutions. It then elaborates on the resulting shift to mass systems of provision and the consequent emergence of non-completion. Chapter two presents the significant volume of existing research into why students fail to complete and/or progress, and draws out the key understandings of why significant numbers of students fail or leave their course in the first year. The third chapter looks at the research on solutions to the problem of student non-completion, in particular focussing on evidence and evaluation. This provides a lead into chapter four which presents some inherent problems with existing research into retention, and calls into question the reliability of withdrawal research and the problem of implementation and evaluation of solutions. Following on from this, chapter five presents the methodology used to investigate retention on the business programmes at the University of Huddersfield (UoH), and the results of this are presented in chapter six. The final chapter draws out the key findings of the project, relating them to existing theoretical perspectives, but also emphasising new insights. Further recommendations for research are made and the potential practical applications are offered in the context of generable applicability across the sector.

1.0 INTRODUCTION AND BACKGROUND

In this section the nature of Higher Education systems is established, initially discussing the concept of HE as it applies to all countries and contextualising its role within society. The various structures that HE systems can take are presented and the global movement toward mass systems illustrated. Particular emphasis will focus on the UK and NA experiences of development, providing a useful comparison of early and late trajectories toward massification. This widening of participation has consequences for the nature of the student cohort and bears witness to the emergence of what is known as the non-traditional student. This phenomenon, only recently experienced in the UK, but extant within the NA model for some time, is then analysed in terms of implications, in particular the propensity for high participation systems to experience high drop-out rates. Student retention is then defined and approaches to its interpretation and measurement are investigated. The section concludes with a general discourse on the apparent failure of HE systems to deal with retention.

1.1 A changing HE landscape.

There are few sectors of society that generate as much attention as education and education systems. Education is seen as central to the development and welfare of a nation through its potential to impact on many areas from the economy to the social fabric and structure. It is the post-compulsory sector, and within this HE especially, that has emerged as a vital tool that can be utilised directly to influence both economic development and as an aid to social reengineering and cultural propagation. It does this through a combination of its two main activities, namely research and increasingly important, through the education of its population. Research has long been a central activity within HE and its contribution in particular to scientific and technological development and innovation are well established. The other central function of HE is teaching and certainly within the UK it has traditionally had a lesser profile than that of research. It is this activity though that has become increasingly important, in particular in the context of the modern economy, where, HE is becoming the key supplier of a suitably trained and educated workforce.

Alexander (2000) states the case:

This reliance on Higher education as a principle economic engine is accented by today's world economy, which is changing national economic and educational needs more rapidly than ever before.(p 412)

It should be no surprise then that in most countries the prevailing administration will take a keen interest in HE and this is reflected in the levels and forms of control that governments utilise in order to manage the sector. The main determinant of this control resides in the nature of how HE is financed and in particular the proportion of total resource allocation to the sector provided by the public purse. In most countries a proportion of higher education institutions are within the public sector; that is they are financed through central government. The proportion of public funding of HE will vary from country to country but in the UK the sector is relatively heavily dependent on central support. There are signs of this changing as the process of creating a more market orientated HE sector initiated by the Conservative Government of 1979 (Lindsay and Rodgers 1998) gained momentum with the Labour Government for public accountability for how those funds are being utilised.

The increasingly challenging environment that HE operates in, the increase in demands for accountability, and the gradual move toward marketisation, places institutions in a paradoxical position and is a perennial source of tension between the universities and their paymasters. According to Green and Hayward (1997: 4) on the one hand universities stand for traditional academic liberalism and independence and are tasked with the function of knowledge transmission, but on the other hand exist and are part of a dynamic modern technologically driven society that looks to institutions to contribute. Certainly within the UK where the system retained a largely elitist culture and structure until only recently, there has been a long period of tension between the Universities and Government (Stevens 2004).

These pressures affect HE on a global scale but as Pugh et al (2005: 27) point out, a key driver of government interference is provided by the move to increase the level of participation. Within the UK there is an ongoing philosophical debate about the raison d'être of HE, albeit mainly in those institutions that retain a relatively elite status, but the move toward increasing participation has been the key characteristic of the

industry in the past decade or so. Participation refers to both the proportion of eligible attendees that go to University, and within that group also the types of student represented. Scott (1995) provides a useful analysis of the paths of development that the HE sectors of various countries have followed, and whilst acknowledging cultural and structural differences argues that political, social, and economic issues are the common agents driving change globally. This trajectory is typically characterised as a movement from low participation with most institutions classed as elite, to generally wider participation, and a situation of mass HE with an increase in different types of institution. He is at pains to stress the way in which the changes that have occurred in other countries is mirrored in the UK:

But it is impossible to write about this shift from elite to mass higher education solely from a British viewpoint. Mass higher education is a much wider phenomenon-in two senses. First higher education systems in all developed countries are being transformed by the same pressures and in similar ways. So comparisons with the rest of Europe, Australia and the United States are unavoidable.Second the development of mass higher education is only one of several modernisations under way in late-twentieth century society (preface)

The shift to high participation systems has occurred at varying paces between countries but certainly the UK stands out as one of the last to move toward a mass system.

An indication of the movement toward expanding participation is provided in Figure 1 which shows the level of participation of the 18-19 year old group between 1960 and 2010. The figure is a composite, constructed from two sources; Kogan and Hanney (2000: 51) covering the period 1960-1995, and the subsequent years from a Higher Education Funding Council for England (HEFCE) report (2010: 4). Whilst there is an acknowledgement of differences in definitions of 'HE' and 'participation', nevertheless the trend is clear. Of particular significance is the substantial increase between 1985 and 1995, a phenomenon observed by several authors (Hodgeson and Spours 2000; Lewis 2002; Lindsay and Rodgers 1998; Stevens 2004). These figures cover only the 18-19 age group, which would largely be the more traditional types of student.



Figure 1 Participation of eligible young (18-19) population in HE 1960-2010 (UK)

It was the Labour administration in 1998 that began to look at widening access more formally in order to increase the participation of previously underrepresented groups in HE. In 2002 the policy was established with the aim of 50% participation for young people under 30. According to the National Audit Office (NAO) participation rates between 1999 and 2004 were relatively stable increasing only from 39.6% in 1999 to 41.3% in 2004. Current participation levels are around 42-44% (the figure varies depending on the source) and seem to be relatively stable, but there is concern that the 50% target is not only unattainable, but also perhaps not desirable. Whilst the expansion between 1980 and 1995 saw a 50% increase in the student population, according to Lewis (2002: 206) there was little change in the relative proportions of students coming from higher or lower social groups. Further subsequent concerns were expressed that the policy of extending access to all who are eligible, may not have actually benefited those for whom it was primarily intended. Leathwood and O'Connell (2003: 612) cast doubt on the application of the term 'mass' to a system where only 14% of the working class participate, and go further by suggesting that widening participation has simply served to re-construct existing class inequalities.

The response of the establishment was to establish the Office of Fair Access as part of the Higher Education act of 2004, but despite this, problems and doubts remain. Longden (2006: 174) for example suggested that participation of students from lower social economic groups (SEGs) had not increased over the past 40 years whilst participation from more traditional university students (and by definition upper SEGs)

had been sustained, thus prompting fears of 're-stratification' into a two tiered system. It is a sentiment reinforced by Cooke et al (2004) who suggest that despite the doubling of participation, the student body has remained predominantly middle class and from advantaged backgrounds. What is particularly concerning is the fact that over this 40 year period the participation of lower SEGs had remained static irrespective of a myriad of policies, programmes and initiatives specifically aimed at getting these students to university. Despite this we now have what can be considered to be a mass system in the UK, and this has implications for the type of student that is now attending university.

1.2 Non-traditional (NT) students.

Elite and mass systems are largely differentiated by the nature and size of the student populations they attract. Elite systems are characterised by low participation rates, and the students will display broadly similar characteristics in terms of academic achievement, social group and background, with the opposite being the case for mass systems. A useful comparison of the two systems is provided by the UK (Elite) and US (Mass/Universal) in the 60's, and Sewell and Shah (1967) articulated the key differences:

Where aristocratic conditions underlie the contemporary class structure as in Britain, mobility is sponsored and educational selection is overt, systematic, and prompt in the school career of an age group of children from which an able minority is chosen for Higher Education.(p 68)

They go on to point out that the North American system essentially selects through a process whereby students dropout from college. Likewise this propensity to use the actual system to select out students was noted by Iffert (1958) who commented on the practice being particularly common within public institutions. The effect is that elite systems have fewer students that tend to be homogenous in terms of characteristics and ability whilst mass systems are typified by a larger cohort with a more disparate set of abilities and indeed a less homogenous set of characteristics.

Within HE a terminology has developed to describe both of these student types, with those that traditionally attended university being known as traditional students, whilst those who would not have traditionally attended are referred to as non-traditional. As already indicated the UK up until the 80's was still essentially an elite system whilst NA, Australasia and Europe had been mass or universal based for some time. As such we can posit that mass/universal systems would be familiar with the concept of the non-traditional student and indeed research from both NA and Australasia reflected the acknowledgement of such. Notwithstanding this acknowledgement, a definition of NT remains elusive, although the characteristics that generally qualify a student as NT are reasonably well established. In fact it is useful to look at the characteristics of the traditional student and then it becomes easier to identify if a student is NT. A traditional student will be 18-19 years of age, they will live on campus, generally have a good pre-university academic record and will be studying full-time (Laing et al. 2005: 169-170). Other secondary characteristics might include having one or more parents that attended university, being classified in a higher SEG, and the home address being in an affluent economic area. Consequently any student that differs on one or more of these dimensions could conceivably be characterised as NT, but this potentially causes a problem because some students could display both traditional and NT characteristics. McGivney (1996: 7) suggests that the increase in mature students has lead to wider diversity of the student population because mature students normally display other non-traditional characteristics, such as being non-white ethnicity, and not having traditional types of qualifications. To this could be added living at home and perhaps holding down jobs.

Despite the fluid nature of the concept there have been some characteristics that are considered to be indicative of the NT student. One of these has traditionally been the living circumstances of the student, in particular whether the student lives at home (commuting student) or in university accommodation (residential student). Chickering, (1974) whilst identifying some common characteristics, argue that living at home is a unifying factor common in most NT students. Bean and Metzner (1985) pick up on this idea and raise the notion of differential experiences between traditional and NT students:

Non-traditional students are distinguished by the lessened intensity and duration of their interaction with the primary agents of socialisation (faculty, peers) at the institutions they attend. (p 244) The problem of definition is aptly illustrated by Quinn et al (2006) in a report on working class student dropout. Acknowledging the potential complexity of defining working class they opt for using two key characteristics, whether the student is local, and if they are first generation. They also suggest that the non-traditional student tends to gravitate toward the post-1992 institution essentially creating a two tier system in all but name. It was a point rather more clearly made by Diane Reay who argued that in effect we have an elite and a mass system in operation, but the mass system only applies to the working class (cited in Leathwood and O'Connell 2003).

1.3 The student retention phenomenon.

Increasing participation rates automatically leads to a change in the makeup of the student cohort at a national level, a trend that is unevenly spread around the sector. The increase in student numbers also has a rather unwelcome side effect in that the proportion of students who leave before completing their chosen programme seems to increase, in particular in the sector that experienced the impact of WP most acutely. This phenomenon, although difficult to identify at a national level, is brought into sharp focus when comparing institutions. In the US, Tinto (1993: 14-21) provided compelling figures to indicate how the more selective an institution was, then the less acute retention was as an issue, and it was increasingly evident that in the UK the retention problem was largely restricted to the post-1992 institutions.

It is no coincidence that institutions who take large non-traditional populations are generally preoccupied with student retention, and this is a global phenomenon. Jex and Merrill (1962: 763) cite unpublished doctoral work from the 1950's for the University of Utah that indicates relatively poor performance of veterans that entered HE under the GI bill and in the UK Mountford (1957) found that failure rates were higher amongst ex-servicemen at Liverpool University. Glass and Garrett (1995 : 119) suggested that community colleges tend to have higher dropout rates than four year institutions due to the characteristics of the student cohort. In the UK Lord Robbins' report (1963: 190) specifically associated the low level of dropout in the UK with the relatively low levels of participation, comparing it to the 40-50% levels experienced by the US system where participation levels were much higher. This report also found a wide variation in retention rates across institutions, a finding

corroborated by the University Grants Committee (UGC) report on wastage in 1968. Later Johnes and Taylor (1989) found that institutions that took more non-traditional¹ students tended to have higher dropout rates.

That a proportion of students will not complete their chosen course of study is only to be expected, even in elite systems some students will not complete as evidenced by various reports from the UK (Cox 1971; Lord Robbins 1963; Mountford 1957; University Grants Committee 1968), but certainly at a systemic level it seems evident that the rate of non-completion is inversely correlated with participation rates. In terms of why this might be the case, logical deduction would suggest that the new participants are generally less academically qualified and do not have the cultural capital to enable success within what are still predominantly elitist higher education cultures. Thus for NT students success in university is as Thomas (2002: 425) suggests "…more of a struggle and less of a right than for other students".

Concern for the problem tends to be driven by a number of things, and this concern is well evidenced from an early stage in those countries that have traditionally had mass systems. In the US there is ample evidence of retention related research from as early as the 1930's, and whilst the UK HE system remained largely elitist, Oldham (1986: 10) suggested that the changing face of the industry would surely lead to a similar concern for retention in the UK. The research community in the UK was aware of the relationship between participation and dropout, Heywood (1971: 191) for example refers to the high dropout rates in the US system to suggest that this was as a result of high participation levels, and Wilson (1972: 21) noted that in the UK the number of students failing academically had increased as participation had increased.

The increasing volume of research is testament to a mounting problem, but concern in the institutions is also driven by other reasons, not least of which is the potential loss of income and the link to reputation as a result of the publication of retention figures in the UK by the Higher Education Statistics Agency (HESA). Summerskill (1962: 628-629) identified both of these issues as being central to concern for institutions in

¹ Non-traditional students were represented by proxy measures such as living at home, A-level scores and pre-university educational institution, although these students were not specifically referred to as "non-traditional".

NA, and additionally suggested that the loss of an educated student is potentially detrimental for the economy. There are clear parallels in the UK and McGivney (1996: 14-20) stresses the two key foci of institutional interest as being loss of income, and damage to reputation. She continues, pointing out the particular importance of reputation in the light of Government requirements for retention data to now be published, and suggesting the emergence of a wider perspective that includes Government interest in retention.

The drive for accountability in the use of public funds has already been indicated, but there is also the role of HE in delivering wider economic objectives such as social justice and economic development. In terms of serving the economy Yorke (1999) makes the observation that this is a universal objective:

However, the issue is not uni-dimensional. There is a general international perception that economies are best served by maximising the level of education in the populace. (p1)

This theme of contributing to the economic wellbeing of the country has been a long acknowledged objective of HE in the US, but even in the UK under the elitist system there was an overt recognition of the role of HE (Lord Robbins 1963). The second objective of social justice is, as Yorke and Longdon (2004: 4) point out, a function of policy differences in countries, and therefore is less universal. The mechanism through which HE can enhance social justice is through the benefits that tend to accrue to graduates. In a report by the Institute of Education for HEFCE (2001), graduates were found to have significant life advantages including higher salaries, better health, and better educated children. Students themselves are sometimes lost in the general discourse, but it is this group where the personal impacts are felt most.

The key problem is the negative way in which non-completion is perceived by both key stakeholders in HE and the media. In the UK where degree completion times are particularly tight and set at three or four years, any deviation from this is considered problematic. In the US where time to complete a degree is not set and significant inter-institution transfer takes place, there is less of a negative connotation. The result is that the student who fails to complete has a general stigma attached to them that affects both themselves and others' views of them. Clearly then increasing the proportion of non-traditional students in HE, and ensuring their progression to completion, fulfils both of these objectives. It is because we know that NT students are more likely not to complete, that poor retention strikes at the heart of both these macro policies, and can have serious implications for the wellbeing of the individuals who leave.

1.4 Defining and measuring retention

Whilst retention was a universally acknowledged problem, and whilst concern was expressed at both government and institution levels, there was a recurring issue related to how retention should be defined and subsequently measured. The problem starts conceptually when we look at the number of different terms that are used in order to refer to retention. Some of these terms are relatively more perennial than others and their usage can be traced throughout the chronology. For example mortality; attrition; dropping-out; departure; withdrawal and non completion are all terms that have seen regular use, but they imply that the problem lay with the student in some way. Indeed it is until only recently that discourse has witnessed a shift in the terminology to reflect a move away from pathologising the student. Thus the emergence of terms such as retention, progression and success as a way to project a perhaps more progressive and positive view that brings in the institution as at least having a responsibility for student non completion.

As definitions and terms differ, this leads logically to differences in how the phenomenon is understood and subsequently measured , and these problems are evidenced by the ongoing discourse on how to measure the level of dropout, initially in NA, and subsequently elsewhere. When measured at a systemic level, because of the need for brevity, aggregate approaches are used. So for example national statistics would measure the proportion of students who fail to progress to year two, and the proportion of students who eventually graduate. In the NA context, where even though the four year assumption applies, student mobility and the flexible completion times call into question the graduation statistic based on this time limitation. The problem has been central to the retention discourse in NA, Eurich (1933: 692-693) for example was at pains to point out the problems imposed by defining and measuring dropout and calls into question the concept of failure itself. Likewise Iffert (1958), in

a national study of non-completion in the US, found that only 40% of students graduated at their original institution, but that the eventual rate of graduation was closer to 60%. In a longitudinal single institutional study, Jex and Merrill (1962) derived a similar figure as students eventually graduated at later dates and at other than their first institution.

This problem of what constitutes non-completion or failure and how it should be measured and presented is a well understood concept in NA for example Eckland (1964) argued that leaving college within a four year period did not constitute an end to a persons' education. Spady (1970) later summarised the problem suggesting that systemic measures of dropout will vary due to what is being measured, either firstinstitution dropout, or systemic non-completion. Later research acknowledges the different types of leaving behaviour and the complications this can cause in measurement. Volkvein and Lorang (1996) for example provide a useful indication of the nature of the NA system in their investigation of the behaviour of what they call "Extenders", students who take longer than normal to complete their course. On the same issue Rummel et al (1999) suggest that students in year one are still effectively "shopping around" and as such dropout from a particular institution is viewed positively. In Canada, Wintre (2006) a longitudinal follow up study of leavers at a Canadian University found that the true attrition statistic is somewhat lower than the initial one due to students transferring and graduating elsewhere. This complexity is aptly illustrated by Hagedorn (2006) who provides thirteen different student trajectories through the HE system, arguing that the application of generic terms such as persistence or non-persistence are simply inadequate. Within the UK where the structure of the degree is geared strongly toward four year completion, and the rate of movement between institutions and courses is relatively lower, then graduation statistics may be relatively more accurate. This provides some explanation for higher completion rates at the same institution, but interestingly Yorke et al (1997) point out that as the UK system begins to take on some of the flexibility characterised in NA, this could compound the problem of measuring retention.

Whilst the majority of research focussed on systemic retention and on overall graduation rates, it was recognised from an early stage that most students who did not obtain a qualification were failing or leaving in their first year. Smith (1924) noted

that of the students who dropped out of Wisconsin University, 60-70% of them did so in the first year, a similar figure provided by McNeeley (1937) in a multi-institutional study. Koelsche (1956) identified that 60% of students who did not complete their degrees left in the freshman year, 25% in the sophomore year and 15% in subsequent years. Other work generally supports this ratio (Iffert 1958) and points to year one as being critical in the student experience. Levitz et al (1999: 37) provided a similar statistical ratio suggesting that the rates of attrition are 30%, 15%, 8%, 4% and 2% for each subsequent year providing a total attrition rate of 41%. It was clearly evident that the majority of students who left or failed were doing so in this first year, and whilst studies of total dropout rates continued, even at this early stage many researchers were beginning to focus on year one (Holmes 1959; Ikenberry 1961; Yoshino 1958).

At an operational level the concept of attrition can arguably be measured more accurately simply because the context is more condensed. Additionally in the UK and Australia because students are selected for courses rather than institutions, as is the practice in the US, this facilitates course level retention performance measurement (Robinson 2004: 3). Even so Woodward et al (2001) argue that when one drills down to the local level, the terminology begins to take on multiple meanings because it is socially constructed and subject to local conditions, policies and culture. Similarly Reimann (2004) points out that there are potential problems and some confusion even when focussing on the lowest level of the module finding that there was a substantial variation in the way that different academic groups both interpreted and measured non-completion. She found that collating the multiple sources of data for a particular module indicated significantly higher dropout rates than reported officially. Similarly Clark et al (2008) present the problems of multiple interpretations of terms such as persistence and attrition and how variation in measurement can cause confusion.

It seems that the definition and measurement of retention is problematic irrespective of what level is being assessed. The problem is well summarised by Panos and Astin (1968)

The point is simply that it is important in any research on dropouts that "dropout" be unambiguously defined, and that the definition make sense with regard to the problem being investigated and to the possible application of the findings (p 70)

This is supported by Pantages and Creedon (1978:56) who furthermore suggest that studies should be at least 10 years in length. It is vital that what is being measured is made explicit because of the potential for confusion. In this thesis the focus is clearly on the operational level and this is further defined later in the thesis methodology.

1.5 Global retention performance

Irrespective of how it is defined, retention performance is routinely collected and published in many countries at both national and institution level. A rather concerning trend throughout the history of retention research has been what seem to be relatively static retention performance figures at both national and institution levels and where data is available, down to course level². Researchers in NA have been cognisant of this situation for some time. Summerskill (1962) for example surmised that given the similarity of figures presented by various studies at both National and institutional level, that dropout rates had not appreciably changed in 40 years. Tinto (1982) supported this assumption by providing graduation statistics for the 100 year period from 1880 that indicates a constant rate of around 45%, and later he commented on the static nature of freshman to sophomore year progression drawing on statistics produced by the American College Testing Programme (ACT) (Tinto 1993). Glass and Garrett (1995) summarised the disappointing performance by citing dropout rates provided by both McNeely (1937) of 45% and later Iffert (1958b) of 50% and stated:

Considering these reports, one can conclude that student attrition is a continuing problem and apparently very little has been done to effectively improve retention this century (p 118)

Recent year one to year two progression statistics for the US are presented in figure 2 and were obtained from the ACT website (2008). They show a trend of overall of declining progression rates across the sector.

² There remains very little evidence of retention performance at any level below institution due mainly to the reticence of institutions to publicise such data.



Figure 2: Percentage of First-year Students at US Four-year Colleges Who Return for Second Year

This problem prompted Seidman (2005) to comment on the general failure of HE to deal with dropout despite significant resource allocation, he says:

In spite of these programmes and services, retention from first to second year has not improved over time. The data also show that graduation rates have not improved over time. Logic dictates that the addition of programmes and services should improve the retention of students, but in reality this seems not to be the case. (p xii)

Baumgart and Johnson (1977) reflected a similar phenomenon in Australia suggesting that a rate of 40% dropout is common across the industry, and had been stable for some time, again against a background of substantial resource allocation and significant research levels. Even within the UK a comment in the Editorial of Universities Quarterly (1971) argued that despite an increasing volume of research in the UK there seemed to be little impact on wastage rates. This was supported by the UGC (1968) report which suggested that dropout rates in the UK had been stable at about 13-14 percent since 1950, a figure that remained constant until widening participation substantially increased student numbers. A report commissioned by the

NAO (2007: 5) presented statistics for industry wide retention between 1999 and 2004 and are shown in table 1.

	1999/2000	2000/01	2001/02	2002/03	2003/04	2004/05
% Progress to year 2	90.3	91.5	91.3	90.9	90.9	91.6
% Degree completion	77.3	78.1	78.4	78.1	77.7	78.1

Table 1 Progress to year two and graduation rates in the UK 1999-2004

To be fair HESA has only been collecting and collating figures for a relatively short period of time but the trend of stable retention rates that seem impervious to both research findings and solution initiatives is beginning to look all too familiar with the NA and Australian experience.

Despite the apparently similar experiences of dealing with retention, a claim often made for the UK is the relatively good performance compared to the rest of the world, in particular that of NA. Reference to table 2 provides an interesting comparison between progression rates issued by HESA of young entrants (under 21) for UoH compared to progression statistics for young entrants on full-time degree courses commencing in September derived from the university system itself.

	2001	2002	2003	2004	2005	2006	2007
UoH progression (HESA)	84.7	84.4	85.4	86.1	86.3	84.1	84.9
Raw data from UoH records	71.8	71.4	77.3^{3}	73.3	73.3	72.4	72.1
US 4 year institutions*	74.1	74.0	73.6	74.5	74.4	74.5	73.7

* Taken from figure 2

 Table 2 Percentage progression to year 2: Local and International comparisons

The data for the UoH internal database indicates a lower rate of progression compared with the HESA figures because it includes the students who left before the December cut off (institutions are not required to include such students in returns to HESA). What this does illustrate is the nature of retention at an operational level, and exposes the significant gap between what is publicly reported and what is actually happening.

Another claim frequently made for the effectiveness of the UK system is that since around the 1980's dropout rates have remained constant in the context of rising participation levels. Whilst the statistics may support this it is again problematic. It is not clear whether figures for retention for periods before regular data collection by

³ This unusually high progression figure was due to an administrative decision to remove large numbers of 'dormant' students from the system.

HESA (pre-1999) includes students who left before December. If they were, then it would make current figures somewhat worse than stated, but there is an additional problem with the claim. Current participation figures are around 42-45% and the period often taken as a comparison is only relatively recent when participation was around 30-35%. Arguably there is not that much difference between 30% and 40% in term of the structure of the system and the nature of student cohort. A potentially more useful approach would be to compare dropout rates from the 60's (Participation 8%, dropout 13%) with the current figures (Participation 40%, dropout 20-25%). This is a more valid comparison of the elite and mass systems of HE.

The 2007 NAO report acknowledged that little progress had been made on improving retention but allayed concern somewhat by presenting UK retention in an international context where it is claimed retention performance is in the top 3 or 4. Several authors though have pointed to the inherent problems of making international comparisons, for example Van Stolk et al (2007: xii) in a report comparing the retention rates of five countries, pointed out the difficulties caused by different approaches to measurement of retention and graduation. Similarly in New Zealand Scott (2005: 13) identified the difficulty of using international comparisons for benchmarking because of differences in finance, education systems, and entry qualifications and policies. The problem was recognised by Malleson (1972: 87) who suggested that a more useful comparison of the US and UK systems would be made by comparing the respective selecting and recruiting institutions in each country. Looking at table 2 again, progression rates have been included from table 1 for the US 4 year colleges. This provides interesting reading because the US figures are very similar to the year one to year two progression statistics from the UoH system.

Whilst the blanket comparison provides a useful political tool and allows favourable comparisons with other HE systems across the globe, it may actually be counter productive in terms of solving the problem because of the message it sends to the HE community. Most HE employees have little direct contact or interest in student retention (despite the rhetoric to the contrary) and the publicising of comparative retention figures that continually place the UK in the top 3 or 4 globally in terms of retention performance does little to stimulate interest. Those of us who do experience dropout at close quarters and the effects it has on students are in no position to ignore

the December cut-off. The devastation a student can experience in leaving in teaching week 8 is no less than one who leaves in week 18, or one who fails academically at the end of the first year. The suggestion that it is out of the control of the University to do anything about term 1 leavers is seriously misleading and quite clearly means we are failing to support a significant number of students.

1.6 Summary

The common experience of HE systems in developed countries is of a move from elite to mass conditions where increasing participation has led to significant changes in the characteristics of the student cohort. The emergence of the non-traditional student, and the increasing concern with the levels of non-completion that seem to follow, is a common experience in Europe, NA and Australasia. Logically it is in the interests of all those concerned that this problem is addressed, but it is evident from countries that have had mass systems for some time, for example NA and Australia, that despite extensive research and resource allocation, there seems to have been little impact on student non-completion at a systemic level. In the UK the movement toward a mass system is a relatively recent phenomenon but similar patterns are beginning to emerge in terms of rising concern with retention and progression. Additionally there are early signs that retention rates in the UK may be as resistant to attempts to reduce it as has been the case in NA and Australasia. The problem of retention has generated a huge amount of academic interest manifest in research output on both why some students fail to complete and additionally on what can be done about the problem. The next two chapters present the research on both aspects of retention, initially looking at why students drop out and then following on from this the increasingly voluminous body of research that looks at potential solutions.

2.0 RETENTION AND PROGRESSION

The previous chapter gave an indication of the global nature of retention and in particular the way in which there was a direct correlation between participation levels and the rate at which students seemed to drop out and/or failed. It also indicated the level of concern shown by all interested parties, particularly by the academic institutions who engaged in extensive research into which students dropped out and why. This is presented in the next chapter and draws mainly on the significant body of research from NA and Australasia where engagement with the problem began at an earlier stage than in the UK. There are two central themes for the chapter, both related to the dropout of students. The first theme is that of individual student dropout, that is the reasons given by students, and the characteristics of dropout prone students identified through research. The second theme moves away from a pathological view of the student as the problem and opens a discourse on institutional behaviour, structure and culture and also other wider industry issues that may impact on retention.

2.1 An old problem

Concern for retention can be traced back to a very early period in the US. Caldwell (1922) for example raises the issue of dropout of freshmen, and using data from 107 institutions derives a dropout figure of 32% in the first year. With a projected loss of 32,000 students out of 100,000 new freshmen it prompted him to state:

In the light of what this annual loss means to the institution and to the students concerned, is it not worth our while to devote more attention to its causes, and as far as possible to remove them? (No page number)

He followed this with a study of why students leave (1924) establishing generally what would be a common set of factors that included poor academic performance, personal issues, family problems, financial reasons, transfers, and marriage, (notable more for women). These findings were largely mirrored in the work of Caldwell's contemporaries (Cooper 1928; Mitchell 1942; Moon 1928; Smith 1924; Snyder 1936; Snyder 1940) all of whom focussed on individual institutions. Much of this early

work was relatively sophisticated and was not simply restricted to identifying the individual reasons that students withdrew. Louise Snyder (1940) for example identified different rates of retention between male and female and between different types of courses. Also she noted the impact of doing paid work whilst studying, and the impact of pre-college academic achievement. She concluded with the observation that dropout was a complex process that could not be attributed to a single reason. Concern at the national level prompted the US Department of the Interior to initiate a nationwide study of retention. The work carried out by McNeeley (1937) covering 6.5% of the total freshmen population for the most part reflected the findings of the institutional level studies. It also added a systemic perspective on the problem, for instance he identified that there were significant differences in dropout rates between different types of institution, and even between subject groups within institutions.

At the end of the second world-war the G.I. bill of rights extended participation in HE significantly, but it also changed the nature of the student cohort, and additionally saw a parallel increase in both the volume and variety of retention related research. Whilst the focus had mainly been on the academic weaknesses of students, there was a growing body of research that recognised that students would leave college for non-academic reasons, and that some well qualified students were leaving. Jones (1953) argued that only around 20% of students who left were not up to the academic rigours of university, and similarly Halladay and Andrew (1958) suggested that many of those withdrawing do so for non-academic reasons and Koelsce (1956) commented specifically on the issue stating that:

Low Scholarship is not entirely dependent upon a lack of ability on the part of the student. It is the result of many factors converging and exerting an influence on an individual. The college records indicated that many of the drop-outs could have profited from a college education. (p 356)

It is an observation given further support by Summerskill (1962) in a synthesis study where it was observed that actually around 60%+ of withdrawals were non-academic related. What was evident was that some well qualified students were dropping out, but also that many students with non-traditional backgrounds were successful. This phenomenon was the catalyst for research that considered successful students as well as failing ones. In a rare qualitative study Yoshino (1958) compared dropouts with students that persisted, finding that both groups complained about similar things such

as lack of preparation. Similarly Slocum (1956) identified that there are normally several factors acting on an individual that provokes dropout, and that leavers and those staying report similar problems.

An additional dimension that may account for this phenomenon was related to psychological and motivational factors. This was recognised and as such a further psychological and motivational dimension began to emerge in order to explain retention. Astin (1964) for instance found that even high aptitude students dropped out for the same sort of reason as other students. He also suggested that students displaying particular characteristics, such as aloofness, being self-centred, assertiveness and seeking personal pleasure were more likely to drop out. In a similar vein Abel (1966) investigated the attrition of students relative to their level of expressed certainty about both academic and vocational goals, and found that those who expressed uncertainty were more likely to dropout. Meanwhile Fullmer (1956) compared the dropout rates of students who changed their minds on majors, as opposed to those who stayed with the same major. As he pointed out, this goes against the consensus of opinion that student certainty is indicative of likely persistence. Vauhgn (1968) identified differences in psychological make-up of 3 groups, successful students, academic dismissals and voluntary withdrawals finding that successful students are more psychologically stable. This technique of trying to identify key differences between successful and unsuccessful students both in terms of background variables and psychological and motivational characteristics became a recurring theme throughout retention research (Bluhm and Couch 1972; Christie et al. 2004; Glogowska et al. 2007; Hackman and Dysinger 1970; Hayes 1974; Ikenberry 1961; Johnson 1994; Rossman and Kirk 1970).

Whilst the majority of retention research focussed on individual institutions, a number of important large scale studies took place that began to expose the student experience. For example Iffert (1958) surveyed the 1950 national cohort and investigated, amongst many retention related issues, student motivation for attending college. A particularly interesting aspect of this work is how students rated various dimensions of the college experience, in particular the importance of interaction with faculty and peers. Equally important observations are made on the potential effects of expansion of student numbers on both the resources of institutions and the implications this has for recruitment policy. Subsequent large scale studies were able to employ somewhat more sophisticated quantitative approaches due to technological developments. Panos and Astin (1968) indicated that low high school grades, poor planning, low socio-economic background and being of non-white ethnicity were indicators of potential non-completion. They too identified some important institutional related factors, such as the effects of contact with faculty:

> These patterns suggest that students are less likely to drop out if they attend colleges where the classroom environment is characterised by a high level of personal involvement on the part of the instructors and students, and where there is a high degree of familiarity with the instructor. (p 66)

Again there are elements here of the role of faculty-student interaction and contact, and of the impact that the classroom environment can have on retention. Other large scale studies include Bayer's (1968) predictive work that made use of psychological characteristics as well as demographic ones. His results suggested that ability was the main indicator of male success and for females family/marital intention seemed to be the most powerful indicator of success. Astin (1972) whilst acknowledging the contribution of these large sample studies, criticised some of their methodological and temporal shortcomings. Incomplete samples, response issues and data quality and the periods that all these studies relate to, were all considered to be problematic. Whilst addressing some of these issues, Astin also added several new dimensions, for instance he analyses two and four year colleges and also looked at the impact of ethnicity on dropout. His findings suggested that good high school performance, being male, not smoking, being financed through self or parents, having high degree aspirations, and not working during term times, were all predictors of persistence.

The 70's and 80's witnessed an increase in sophistication both technically and in terms of methodology, and this particularly enabled the development of sophisticated predictive studies. These predictive studies invariably utilised multivariate strategies that enabled the investigation of some quite detailed aspects of retention and allowed the testing of particular associations between variables. De Rome and Lewin (1984) drew on both background and psychological data and found that students who prepare psychologically for university are more likely to persist and several authors found a strong association between high school performance and dropout (McGrath and
Braunstein 1997; Ott 1988; Ryland et al. 1994; Tharp 1998). Other issues were found to be important, for instance financial support (McGrath and Braunstein 1997), amount of paid work undertaken, (Ryland et al. 1994), and student age and type of course (Tharp 1998).

Retention in an elite system.

By the 70's retention research in NA was attaining a critical mass. In the UK meanwhile it seemed that despite the industry being cognisant of the issue of retention, it was not considered to be of serious concern, a point aptly articulated by Malleson (1972):

Important as these observations on high wastage rates were thought to be it was generally felt that they applied only to special courses in special circumstances and there was not at first any general anxiety or concern about wastage rates in the universities generally. The accepted assumption was that the British University system produced extremely low wastage rates compared to the rest of the world and was in this as indeed in most other respects-superior to anything elsewhere. But, since no one had been sufficiently interested to have kept the necessary figures, the more general issue remained undebated. (p 84)

Similarly Fulton (1977: 15-16) pointed to the lack of any further serious retention research despite the 1968 UGC report, and the establishment of a central universities data bank. Furthermore he suggested that there may have been an expectation that interest in retention would increase as participation had risen by 50% in the previous decade and that there was a general acceptance of the correlation between participation and retention.

Consequently whilst the level of interest in retention was significantly lower than countries such as the US, and Australia, there were nevertheless some signs of increasing concern. An example was provided by Mountford (1957) who produced a report on graduate completion rates at Liverpool University from 1947 to 1949. Whilst overall the percentage of students not receiving a degree was 13.1%, it provides a detailed breakdown of non-completion by types of student and academic department. Ex-servicemen⁴ had a 16% chance of leaving, and 38% of overseas

⁴ After the Second World War the UK had a similar programme to the US GI bill which aimed to provide HE places for ex-servicemen.

students left without an award (although this was on a sample size of only 32). This compared with a dropout rate of 8% for all other types of students. Furthermore, Mountford drew on existing institutional data that identified reasons given by students for leaving. This revealed a striking similarity to findings in NA, and included issues related to family, finance and personal problems, and additionally psychological and motivational factors such as emotional maturity. Interestingly he notes that some students may have made the wrong decision in coming to university, attended due to parental pressure and also some may have over-socialised or just be poorly motivated.

On an official level it was the Lord Robbins' report (1963 : 189-192) that raised the issue of wastage, and whilst only 3 pages out of 296, it nevertheless raised some issues of importance. In particular the suggestion was that the labelling of 82% of the failing students as academic fails was simply inadequate and it was suggested that:

Clearly these categories are arbitrary and can give no insight into the weight to be attached to lack of intellectual ability, lack of application, defective teaching, difficulties of psychological adjustment to university life, to extraneous personal troubles or other factors. (p 190)

The report goes on to suggest that it is the responsibility of the institution to both monitor and address the issue of wastage. It was perhaps the UGC report (1968), entitled "Enquiry into Student Progress" that placed the retention issue front and centre in the HE community in the UK. Whilst the report is descriptive it does provide for the first time a public account of systemic and institutional dropout. Echoing Mountford's (1957) findings the results showed that females were more successful than males, overseas students had difficulties, and science subjects had high dropout rates. The classifications used for students who did not earn a degree for England were 'failed degree' (1.4%), 'withdrew through academic failure' (8.4%) and 'withdrew for other reasons' (2.5%). Because of the poor recording processes within institutions it is likely that withdrawal through academic failure contained students who withdrew for many of those other reasons suggested by both Mountford (1957) and Robbins (1963). The issue is unintentionally exposed by Cox (1971) who looked at wastage over a six year period at Birmingham University and found an increase in the proportion of students leaving for non-academic reasons.

Despite the acknowledgement of the problem there was a focus on academic ability of the student as being a central cause of failure to complete, although some were drawing attention to other factors. Malleson (1963), who had a medical background and was particularly interested in student health, argued passionately that the transition to university was a major upheaval for most students, and it was non-academic issues such as health and circumstances that contributed to and invariably were the source of poor academic performance. In a later study (1967) he revealed the complexity of individual leaving behaviour through an open question survey and indicated in particular the unique circumstances of individual students. Glynn and Jones (1967) in a rare UK study that emulated US surveys on retention research asked students on the extent of institutional factors that might cause withdrawal and found similar results, i.e. complaints about support and teaching.

Notwithstanding the selective nature of the UK system, there was a similar, albeit less widely accepted notion that academic ability was not necessarily the main cause of failure. As in NA, some of the UK's brightest students were failing, particularly concerning in a system were failure was unexpected. Whilst in NA background variables were indicating the problems of NT students, in the UK where the cohort was more homogenous, it was students' personal characteristics and behaviour that came under scrutiny. In a long term study of student withdrawal at the University of Birmingham, Wankowski (1972) emphasised the impact of what he terms 'non-intellective' influences such as motivation, intentions, goal orientation, and other personality traits. Generally speaking he found that failure was significantly associated with various personality traits and behaviour, he summarised:

The complexity of influences which make or mar a student's learning no longer allows us to think that it is some quality in the learner that fosters or precludes achievement in higher education. Complexity must, however, be expected as people generally-and young people in particular-respond to an immensely varied way to life's situations. (p 80)

The background variables so often utilised in NA studies were deployed to a limited extent by Wilson (1972) and combined with various personality traits in a study of failures at Aberdeen University. Statistically he found little significance in most of the background and personality traits but a follow up study of individual cases revealed a

complex set of individual reasons for, and reactions to, failure which prompted him to state:

The case-histories indicate the impossibility of ever attaining accurate prediction of student failure. But they also indicate the variety of causes or excuses students advance, and the reactions to 'failure'. Indeed they suggest that this emotive label with its emphasis on the institutional interpretation of a students' performance cannot be justly attached to a number of these students. (p 32)

Wilson here reveals a discourse on the meaning of 'failure' that was beginning to emerge and that was evident in some of the more qualitative investigations of student failure. What was clear in many cases was that many students who did not complete university did not view themselves as failures.

Despite the warnings of Oldham (1986) who predicted low retention as participation increased, the UK system remained in structure, culture and essence, elitist. The retention research that took place in the period up until serious expansion was largely based in selective institutions. Johnes (1990) for example investigated the retention problem at Lancaster University finding the main reason for dropout to be academic failure, although various background variables are indicative of dropout such as living at home, academic qualifications and gender. At Birmingham University, Rickinson and Rutherford (1995) drew on psychological theories to understand homesickness and the transition process in a selective institution. They found that problems revolved around three areas: academic preparation; emotional preparation and welfare issues such as family and finance. There was little recognition of retention issues for specific types of student, such as NT, although Benn (1995) looked at the retention of part-time students on a certificate programme at the University of Essex. She argues that lack of interest in the NT student in selective institutions is due to:

..the continued predominance of young, well qualified entrants into this predominantly full-time, residential and privileged sector. (p 6)

The nature of retention research in the UK was coloured by the elitist nature of the system, even during the period of greatest expansion (1985-1995) there seemed to be little concern with retention as an issue. It is during the latter part of this expansion that a number of large scale studies began to appear. Initially a report published by the

Department of Education and Science (1992) covered non-completion in the polytechnic sector for the academic year 1987/88. Whilst descriptive in nature it nevertheless highlighted the issue in the non-selective sector. A more detailed explanatory report that encompassed a mix of both selective and recruiting institutions was carried out by Yorke et al (1997) followed soon after by a large scale study of North-Eastern University retention (Dodgeson and Bolam 2002) and a national study of student dropout (Davies and Elias 2003). Whilst the findings and subsequent explanations of student non-completion mirrored research in NA, these reports nevertheless provided a departure point for the subsequent increase in retention research in the UK. When it came down to the individual student experience there were broadly similar themes emerging to explain why some students failed to complete, and particularly important was the recognition that this was a highly complex problem.

A common student experience

It was evident from research in NA that certain background and demographic variables were indicative of the likelihood of leaving HE before completion, particularly those variables that defined a student as NT. Furthermore there was research from both NA and the UK suggesting that psychological and motivational characteristics could have a part to play in explaining why some traditional students might leave, and in particular in NA, why some NT students were successful. Asking students why they left produced a generally consistent response across the sector. Students, irrespective of which country they studied in provided remarkably consistent reasons for leaving. An indication of this consistency is illustrated in table 3 which contains a selected list of published work on retention were specific reasons for leaving have been provided by students.

	Smith 1924	Mitchell 1942	Johnson 1953	Iffert 1958	Astin 1964	Demos 1968	Wankowski 1972	Rump & Greet 1975	Johnes 1990	Thomas et al 1996	Rummel et al 1999	Yorke 2000	UoH 2001-2008
Sample ¹	Ι	Ι	Ι	MI	MI	Ι	Ι	Ι	Ι	Ι	Ι	MI	Ι
Instrument ²	R&S	S	S	R&S	S	S	S	R&S	R	R	R	S	R
Country	US	US	US	US	US	US	UK	AUS	UK	UK	US	UK	UK
Health	2							3					
Employment				3		2		1					
Personal/domestic		3	3	ļ	3	3		2	2	1	3		2
Marriage													
Military													
Transfer/wrong course									3	3		1	3
Work too challenging				2									
Financial	1	1	1	1	1	1						3	
Death				ļ			1					•	
Low motivation		•		ļ			1		1			2	
Academic failure		2	•				2		1				
Dislike of course			2		2				1		2		
Student dropped At university against will							3				4		
Excluded/non attendance							3						
Poor support/bad teaching													
Other/No reason	3									2	1		1
 I = institution, MI = Multiple institution. R= Institution records, S= survey 			Key —		1 2	Most frequently provided reason Second most cited reason							
					3	Third most cited reason							
							Other reasons mentioned						

Table 3 Common reasons given for non-completion.

It is interesting to note the differences between research using surveys as opposed to that drawing on institutional exit surveys. The first six pieces that rely on either surveys or a mix of survey and exit records, show a broad similarity in terms of reasons for leaving and is indicative of the consistency of structure of these early surveys. The only pure survey after this period is the Yorke (2000) study which indicates some variation that probably reflects the structure of that particular survey. The later studies based on institutional records alone display a consistently different pattern and notice is drawn to the incidence of the 'other/no reason' category. Whilst the methodologies, sample sizes, questionnaire focus and design, and other aspects such as the types of institution might differ, there is nevertheless a clear consistency in what students would report as being the reasons for leaving university.

2.2 Retention as a process: models and theories

Notwithstanding the significant volume of research into retention, and the several attempts to synthesise this research (Knoell 1966; Marsh 1966; Sexton 1965; Summerskill 1962; Waller 1964), it was largely descriptive in nature. One or two early qualitative works hinted at the complex nature of withdrawal, Yoshino (1958) for example found through interviewing students that there were multiple reasons for dropout. Also in a rare in depth qualitative longitudinal study of five students, Sarnof and Raphael (1955) revealed the complexity and uniqueness of individual student problems:

Despite the small size of our sample, a surprisingly wide gamut of failure-inducing factors was brought to view-physical, mental, social, economic; intrinsic and extrinsic; underlying and immediate; and in varying constellations. Where a given factor was present in two or more cases, its impact appeared to vary from case to case, depending on its own weight and its relationship to other elements in the total individual configuration. (p 369)

The suggestion was that students change over time, and indeed one of the possible results of this change could be a decision to leave. This idea of dropout as a process was explicitly explored by Chickering and Hannah (1969) who posed a number of questions about how the decision to leave came about, what factors influenced it, and when they occurred. What was lacking was some form of theoretical framework that could explain this process and the first to respond was Spady (1970; 1971) who developed a conceptual framework based on Emil Durkheim's theories related to suicide. In both works Spady argued that dropping out of college was a similar process to dropping out of society, when students did not fit in they left, just as members of society that did not fit in may commit suicide.

Tinto

This theme was picked up and further developed by Vincent Tinto (1975) in what was to become the student integration model (SIM). Tinto's model (Fig. 3) explains how students arrive with particular background, personal attributes, and educational experiences and then interact with the college environment. As the model indicates this affects two variables, goal and institutional commitment and subsequently the levels of academic and social integration. The model seemed to be a useful way of

explaining some types of behaviour, for example a student that transfers may have had strong goal commitment but low institutional commitment. Furthermore it may go some way to explaining why when most students experience similar problems only some of them leave. Perhaps the strength of goal and/or institutional commitment would be enough to overcome these problems.



Figure 3. Student integration model

Now armed with what promised to be a useful framework for explaining retention, researchers earnestly set about the task of testing the model, in particular efforts focussed on validating particular constructs (Pascarella and Terenzini 1977; Terenzini and Pascarella 1980). These early validation attempts focussed on the process of interaction, particularly the incidence of interaction and contact between students and faculty. The application of the model also served to support the complex nature of retention a point that Terenzini and Pascarella (1980) reflected upon:

These studies, moreover, support Tinto's conception of the complexity of the sociological and psychological dynamics of college student attrition and retention.....It seems clear that the attrition process is a far more complex phenomenon than we have tended to think it is,...(pp 280-281)

The model seemed to provide a useful framework for thinking about retention and testing and application efforts continued apace. Some work took the whole model as a basis, for example applying path analysis to identify interaction between constructs (Munro 1981) or to apply the model to specific groups such as residential students (Pascarella and Terenzini 1983) and commuting students (Fox 1987). Others took a

more focussed approach for example Getzlaf et al (1984) used the Tinto framework to distinguish between different types of leaving behaviour, particularly between those that withdrew and those that transferred. Fox (1987) in a study of disadvantaged students (largely made up of black and Hispanic students) in a commuting institution compared findings with Pascarella and Terenzini (1983) using a similar methodology and variables. They found differences in the relative importance of social and academic integration, a finding later supported in a rare qualitative effort to validate the model (Christie and Dinham 1991). Subsequent work attempted to integrate other theories into the Tinto framework, for example Eaton and Bean (1995) who applied an approach/avoidance behavioural perspective. They distinguished between types of leaving behaviour finding that different types of students had varying levels of commitment. Braxton et al (1995) concentrated on student expectations of college and how these expectations were met. They worked within the Tinto framework and found that both goal and institutional commitment are positively affected where expectations are met.

Bean

Whilst the Tinto model became the industry standard it was by no means the only offering on the market. Bean's (1980) criticism of Tinto was based on the nebulous nature of the constructs and the inability to effectively indicate the patterns of cause and effect between the constructs. Whilst others deployed path analysis within the Tinto model to address this problem (Brunsden et al. 2000; Munro 1981; Pascarella and Terenzini 1983), Bean developed a different model based on work place attrition. He draws on theories of employee retention and figure 4 indicates the structure of the model.



Figure 4 The student attrition model (SAM)

Bean's model is centred on the level of satisfaction which in turn effects commitment to the institution. Satisfaction is a function of what Bean calls 'organisational determinants'. These organisational determinants can effect satisfaction in both positive and negative ways. Like Tinto there is an acknowledgement of the importance of background variables, but Bean's model begins to acknowledge more overtly the impact of the institutional environment on the student. Bean (1982) found that student intent was a strong indicator of leaving behaviour and led to the later development of a model of student dropout syndrome (Bean 1985). Other developments built on other perceived deficiencies of the Tinto model, for example Bean and Metzner (1985) produce an attrition model based the difference between traditional and non-traditional students indicating significant differences. They suggest:

> ...social integration variables should only have a minimum effect on retention, partly due to the way non-traditional students were defined and partly because social variables from the outside environment are expected to be of greater importance than college social integration variables. (p 530)

Further developments of this idea (Metzner and Bean 1987) confirmed these important differences and indicated that the experience of NT students was radically

different to their traditional counterparts. Allen (1999) utilised Bean's model to explain why a significant number of NT students were successful and stated:

While it certainly can be argued that it does not take "fire in the belly" to succeed in college, especially if one has above average intelligence and a supportive and financially secure environment, desire may be a significant missing link for marginal performers. (p 461)

This idea of motivation overcoming potential risk factors was clearly exposed by Smith (2004) who found that at risk students greatly increased their chances of progression if they were receptive to support. Explaining this using Tinto's framework would suggest that Allen and Smith are referring to students who are academically weak on entrance but that have high levels of goal commitment.

Astin

As the development and testing of the Tinto model and to a lesser extent the Bean model continued well into the 90's, periodically other attempts were made to theorise on retention. It was rare for any retention research not to draw on the body of theoretical knowledge that the model period had produced, but there are examples. Astin (1984) whilst not referring overtly to dropout hypothesised that a simple and practical model based on student involvement or engagement was needed. This simplicity was necessary he argued due to the diverse and complex research strands related to student development. Astin's theory was in some ways a reaction to the feverish model development and testing that was taking place at the time, and in a thinly veiled attack on the existing models he states:

The theory of student involvement that I describe in this article appeals to me for several reasons. First, it is simple: I have not needed to draw a maze consisting of dozens of boxes interconnected by two-headed arrows to explain the basic elements of the theory to others. (p 297)

The idea came out of his own extensive work on student development (Astin 1964; Astin 1970) and retention (Astin 1971) and in particular findings from a number of large scale studies (Astin 1975; 1972) where he generally found that student persistence was frequently related to levels of student activity and contact with the institution and peers. The concept was operationalised by the use of student time and the way in which there are competing demands on the student from various directions.

Essentially student engagement could be enhanced by ensuring student time was efficiently utilised, in particular it pointed to specifically how the institution could act to affect this. The two spheres of social and academic engagement essentially mirrored Tinto's concepts of social and academic integration. For example the key element of contact in the classroom can be enhanced by ensuring effective teaching, counselling and advising can help students to organise their time and improve study skills. On the social side institutions can act by providing and enabling other forms of contact such as social clubs. There is an acknowledgement of a clear difference between residential and commuting students though, with residential students naturally having more opportunity to engage. Bozik (2007) additionally points out that students from low income families are likely to live at home and have to work, both cost saving strategies that also reduce the engagement time that these students have with the institution.

Combining models

Whilst it would seem that the integration model of Tinto and the attrition model of Bean are different Cabrera et al (1992) in combining the two models find that there are several similarities. In an effort to identify where the models both converge and diverge, they point out that certain variables seem to be representing the same thing. For example both of the models suggest that pre-college characteristics can have an impact on how students integrate into the University environment, and also an indication of persistence is the level match between the student and the institution. They go as far as to suggest that specific constructs such as institutional commitment in the Tinto model is the same as institutional fit in the Bean model. Whilst there is some convergence they found that around 70% of the hypotheses in the Tinto model were confirmed compared to 40% of the attrition model. But they also found that the attrition model did a better job of accounting for intent to persist and actual persistence. The conclusion is that the models are more complementary than they are mutually exclusive, and that research that derives a grounding from both theories should contribute to a better understanding of retention. A later attempt to integrate existing models and theories was that of Milem and Berger (1997) who used a combination of Astins involvement theory and with a later theory of Tinto's on individual student departure (Tinto 1993). They concluded that there was strong evidence for combining both approaches in an integrated model.

2.3 Contemporary research on retention.

The existing models continued to be developed, for instance Elkins et al (2000) drew on Tinto's separation stage extension to the SIM to investigate early student dropout finding that lack of support had an impact on retention. Brunsden et al (2000) used path analysis to test the robustness of the complete SIM model and drew the conclusion that it did not consider interactionist elements. They go on to call for more ethnographic research. Braxton et al (2000) investigated the impact of active learning on various constructs within the SIM such as social integration, institutional commitment and the subsequent impact on leaving decisions finding support for the idea that what happens in the classroom can have an impact on student leaving decisions. The problem with the models and theories was that the focus remained on the student as the problem.

In the UK the focus of this research shifted from the selective sector to the new university sector simply because retention was an increasing problem in these institutions. Whilst there was a voluminous body of research that could be drawn on from NA and to a lesser extent Australasia, there was a feeling amongst some that alternative theoretical approaches were required that were more reflective of UK HE culture (Longden 2004; Ozga and Sukhnandan 1998). Although these cultural differences were not presented in detail, there was a general criticism of the Tinto (1975) model because it focussed on the traditional student. Some UK work involved model and theory development, for instance Ozga and Sukhnandan (1998) developed a three staged model that considered both student and institution based factors and focussed on three constructs: student preparedness, compatibility of choice and timing of exit. They found that students who were ill prepared and that did not get their first choice of institution and /or course were more likely to drop out, and similarly Lowe and Cook (2003) suggested that lack of preparation and a poor choice basis amongst other disruptions contribute to student problems. Bennet (2003) developed a model that looked at the impact of variables such as satisfaction, age, committed effort and social integration on student commitment to complete. The two key findings were that financial issues had a major impact on the stay-leave decision and that late enrollers

were likely to drop out. Mackie (2001) employed a force field approach identifying forces both within the individual and externally that both pull and push the student to and from withdrawal. It was a similar approach to that taken by Anderson (1987) but whereas Anderson took a strategic theoretical approach Mackie used empirical data in order to identify the effects of forces on individuals. She identified that the key force that distinguished stayers and leavers was internal commitment. Forbes (2008) develops a model that draws on the SIM but encompasses a pre-entry stage and additionally includes many external variables deemed to be missing in the SIM. Forbes' model is somewhat more culturally sensitive, for instance academic integration is replaced with academic acculturation and social integration with social adjustment and the model is clearly geared more toward explaining NT student dropout.

In the UK research continued (much of it utilising qualitative methodologies) on investigating why students dropped out in response to the effects of WP (Boyle et al. 2002; Christie et al. 2004; Lowis and Castley 2008; Prescott and Simpson 2004; Scott and Graal 2007; Trotter and Parmar 2004; Wilcox et al. 2005). Research in NA on why students leave was gradually giving way to an increase in research on solutions. Notwithstanding the recognition of the complexity of retention, and the indications that dropout rates seemed to be largely immune to most of the solutions that had been offered to this date, Braxton (2000) suggested that research on dropout needed to be reinvigorated. This he stated would be best served by either developing the Tinto model so that it essentially did a better job of helping us understand why some students leave, or alternatively by developing new theories and perspectives.

Whilst many chose the first option, other theories and approaches emerged, one in particular based around the ideas of the sociologist Pierre Bourdieu (1930-2002). Bourdieu's notion of social reproduction (Bourdieu and Passeron 1977) is predicated on explaining how access to economic resources alone could not in of itself completely explain membership in a particular social class. He produced alternative forms of capital in order to account for this, such as cultural capital, intellectual capital, symbolic capital and artistic capital. Two other constituent constructs within the theory are 'habitus' and 'field'. Habitus refers to the activities, practices and common understandings that make up a particular social group, or class. A field is an

area of contestation so for example education is a field, politics is a field as is the art world, in fact field is similar to occupational area. The central notion in this theory is social reproduction, essentially it endeavours to explain how social entities reproduce through individuals efforts to maximise their capital.

The key to understanding cultural capital theory and its impact on retention pivots on the concept of cultural capital itself. Cultural capital is possessed by individuals but it is symbolic rather than material and is manifest in things like informal personal skills, habits, manners, linguistic, educational credentials and lifestyle preferences (Berger 2000). Cultural capital also exists at the organisational level and actors within the organization, through their pursuit of cultural capital, maintain the organizational habitus. So for example within HE institutions the culture and climate or habitus is shaped by the collective behaviour of employees and sustained through rules, regulations and laws pertaining to the HE field. This type of organisational behaviour can be driven by external forces, for example Kamens (1971; 1974) argued that it was external expectations that drove organisations to behave in particular ways, and subsequently to adopt and adhere to a particular form. Subsequently cultural capital theory can then be used to explain issues such as inequality in education, selectivity, and why certain types of students go to certain types of institution, but additionally it can also explain why some students dropped out. Essentially if the cultural capital possessed by a student is not congruent with the cultural capital held by the dominant student group, then the student will likely experience adjustment problems (Lehmann 2007).

The mobilisation of cultural capital theory to help explain aspects of retention is a relatively recent development, although the concept of 'fit' between student and institution is not a new one. Certainly within NA the idea of institution/student fit reflects a concern that student success can be optimised if the student is studying in an environment that fits their outlook, perception and cultural/social background.

Summerskill (1962) commented on the relative performance of students from rural and urban communities suggesting:

Results to date indicate that a student's hometown is sometimes and somehow related to success or failure at college. The suggestion is to look beneath the correlations involving variables of population and geographical location; to analyse the educational and cultural characteristics of given communities; to analyse the educational and cultural characteristics of given colleges; and to see to what extent attrition is a function of disparity between hometown and college environments in these educational and cultural terms. (p 633)

The implication was that there might be a natural fit in terms of student and institution and that key determinant components affecting the fit could be cultural, and it may explain some types of withdrawal that defied traditional explanation (Tinto 1975: 117). The student-institution fit concept has been at the centre of approaches to the idea of selection. Waller (1964: 289-291) was explicit in pointing to the importance of ensuring that students are selected on the grounds of student-culture fit, suggesting the match between student culture and college climate directly affects student success. Astin (1975: 128-145) provided a detailed exposition of the components of studentinstitution fit, for example on the student side parental income and education, student ability, size of home town, religion and race would match up against institutional factors such as level of selectivity, tuition fees and college size. In summary he said:

After examining the fit between student and institution, it appears that, in general, persistence is enhanced if the student attends an institution in which the social backgrounds of other students resemble his or her own social background. (pp 144-145)

The application of cultural capital theory to understanding retention in UK institutions may have been particularly attractive both because of the class system that pervades British society, but also because of the embedded elitist cultures that exist in UK HE institutions. In the UK the idea of cultural capital seemed like a particularly useful way of explaining why substantial numbers of students who were classified as NT, particularly those of working class backgrounds, seemed to gravitate toward particular institutions and also why they were more likely to dropout of University. Clearly NT students tended to apply to institutions where they percieved that they would fit in (Leathwood and O'Connell 2003; Longden 2004; Read et al. 2003), or where their cultural capital would have the highest currency. Likewise more traditional students would naturally apply to the more selective institutions where presumably their cultural capital would be valuable.

Both the idea of student-institution fit, and the application of cultural capital ideas to retention, operate against a background where the focus is on the student. But cultural capital theory, through the concept of habitus provided an opportunity to open a discourse on the institution and the potential impact it could have on retention. This has been recognised by several authors, Zepke and Leach (2005) for example referred to the idea that institutions should adapt rather than expecting students to, and Thomas (2002) focussed on the nature of the institutional habitus as a way of explaining why some students might not be successful. The implication was that the problem of retention lay with the institution in the way in which it was structured, and the inherent culture. The problem was identifying specifically what the key components of this organisational structure and culture were.

2.4 It's not them, it's us: how institutions cause poor retention

Despite the relatively recent emergence of an open responsibility discourse, there is ample evidence historically of genuine acknowledgement that the institution is at least partially, if not fundamentally responsible for some student failure. From an early stage this acknowledgement focussed predominantly on issues around both the structure of the learning experience and the standards of instruction and teaching that first year students received, and also on curriculum structure. Caldwell (1922) encapsulated succinctly a problem that remains endemic within HE to this day

> And yet there are other ways in which the colleges are falling short of their duties to these failing freshmen. Shall I dare say that in many cases they are receiving indifferent and uninspiring instruction? The freshmen need the very best treatment the institution can offer, and they often get the poorest. Sections are usually too large and instructors are often inexperienced, or they are of the type who take charge of a section with the deliberate expectation that twenty percent of them will fail. (p 2)

Three issues are raised here, the standard of teaching, the size of classes and the attitude toward, and treatment of students generally. The themes continued to appear throughout retention research and certainly the earlier catalyst for their recognition

was the evident failure of some well qualified students. Iffert (1958) found that well qualified students who failed or dropped out in particular would complain about things like class size and interestingly about lack of access to academics. Likewise in the UK, Malleson (1967) identified that students would complain that teaching was poor, the tutorial system did not operate as planned, and that academics displayed a general lack of interest in their welfare. In the selective UK system where according to Malleson (1972) the industry laboured under a number of what were self-serving fallacies that allowed them to "...*carry on as they were*", he argues for a shift in focus to institutional problems.

The fallacy of this assumption lies, of course, in the belief that the factors which determine drop-out are solely in the student and not in the institution itself. (p 87)

Astin (1975: 149) suggested that student boredom, a major reason identified as causing dropout, was potentially a result of poor teaching and badly designed courses. This particular problem had been identified much earlier (Cooper 1928: 29), but it certainly pre-empts an issue that would become a central construct within Tinto's student integration model. With the emergence of the SIM and SAM model and in particular the concepts of integration, some other dimensions emerged as possibly effecting student retention.

As has been indicated earlier, student integration and subsequent retention could be influenced by institutional variables, such as culture, environment, and more specifically faculty behaviour toward students both inside and outside of the classroom. Endo and Harpel (1982) took a direct approach to the faculty interaction issue and were explicit in attributing aspects of student personal and academic development with the level and quality of interactions with faculty. Whilst they suggested that a significant level responsibility lay with the institution, they also suggested that some responsibility lay with the student, although given the reticence of NT students to be proactive this may be an unrealistic expectation. Tinto (1982) himself suggests that the institution can do much to facilitate both social and academic integration, and includes in this the way in which students are taught. Despite the emerging acknowledgement of institutional responsibility, the problem remains of how to investigate what specific aspects of the institutional culture and organisation actually may affect retention. One potentially fruitful avenue has been to ask students themselves through the investigation of the student experience.

Zepke et al (2006), in a comparative investigation of seven diverse HE institutions in New Zealand, surveyed students about aspects of their environment and the impact it had on their decision to stay or leave. The main themes included teaching and the teaching environment, the nature of the culture and the extent to which students felt they 'fitted in', and the responsiveness and accessibility of the administrative and support systems. They found that there was some support for the supposition that these themes had some impact on student experience and potentially the decision to leave. Interestingly they found that students that actually withdrew rated teaching relatively low down on reasons for leaving, although students who considered withdrawing but stayed rated it highly. Hovdhaugen and Aamodt (2009) also found that students who either withdrew voluntarily or transferred to another institution did not attach much significance to institutional factors in their decision to leave, although they go on to argue that institutions should nevertheless engage in activities that are likely to enhance retention such as closer links between staff and students and closer monitoring of students.

Conversely for Rhodes and Neville (2004) the standard of teaching and the learning environment was rated particularly highly by students as a factor that contributed to the student experience, and was likely to impact on a students likelihood of persisting. To the researchers in this case the message was clear, that many aspects of the student experience, and by deduction institutional retention, were well within the remit of the institution to effect. Glogowska et al (2007) interviewed both leaving and staying students and generally found that students felt somewhat isolated from formal support and that there was no one to whom they could turn for immediate support. They also note the reported inflexibility of the institution especially for NT students who tend to have personal and social responsibilities to deal with outside of the university. This suggested that institutional cultures are unwelcoming to non-traditional students.

2.5 Summary: What we think we know about student withdrawal.

It is impossible to state with any certainty what contributes to the failure of some students and the success of others. The research to date has expanded our knowledge of the problem, but it is doubtful if our understanding has significantly improved. One thing on which there is universal consensus is that the student experience is unique to each individual. The ultimate success or otherwise of the student is a function of both student related characteristics such as background, personality and circumstances, and the culture and structure and behaviour of the institution. The problem is that despite the volume of research, we are no closer to attributing clear causality between any of these variables and retention. Despite this there is an imperative to improve retention rates and the next chapter deals with this aspect of retention.

3.0 RETENTION SOLUTIONS

The next part of the literature review commences with a brief resume of dropout research and how a consensus built around a set of solutions and essentially laying the foundation for programme research and reports that ensued. The solutions to student dropout are as varied as the reasons for dropout itself extending from micro-level detailed programmes to strategic level comprehensive policies. The latter part of this section deals with specific types of programme and solution and finishes with a brief look at retention policy and strategy.

3.1 The emergence of retention solutions

A key feature of early retention research was often a recommended solution. This was predominantly related to improved selection and collaboration with schools, but frequently comprehensive programmes were suggested such as academic support and advice (Caldwell 1922; 1924; Jones 1953; Sarnoff and Raphael 1955; Smith 1924). Some research focussed on recruitment of suitable students and the provision of information to those students as a way to address the retention problem (Lins and Pitt 1953; Slocum 1956). This perspective was particularly evident in the UK due to the selective nature of the system. For example Mountford (1957) pointed to the importance of effective selection, but also suggested institutional actions such as maintenance of the tutorial system and the constant updating of the curriculum as being important. Waller (1964) acknowledged the balance between recruitment and selection, but advised colleges to recruit students that would fit in to the culture in that institution.

Whilst recruitment and selection has always been a main feature of institutional policy, there was from an early stage a growing rejection for its deployment to address retention. Booker (1933), in the context of rising participation in the 20's, argued for acceptance of the realities of a mass system in HE in the US, and that solutions to retention needed to focus on the institution as well as the student. It was a view certainly supported by others in subsequent decades (Mitchell 1942; Snyder 1940). Koelsche (1956) like many others intuitively recognised that participation was

increasing and that institutions would need to change and work with the students they recruited rather than recruit students they would like. This focus of helping students to adapt resulted in some examples of comprehensive solutions. Jones (1953) for example suggested a diverse set of solutions including pre-entry counselling, early intervention, skills support, remedial courses and mentoring by other students. In the UK also there was some dissention at the use of selection. Miller (1970) for example, after an extensive analysis of the potential problems with selection made the case for alternative approaches:

It seems obvious that in order to find ways of lessening wastage, and hence improving the productivity of institutions, other devices will have to be considered. Structural changes in the system, availability of ancillary services, aspects of teaching and examining, and flexibility an rigidity of courses are examples...(p 96)

Malleson (1963) commenting on the arbitrary nature of 'sending down' students, berated the student blame culture and suggested students leave for many reasons. He proposed that the system needed to be more flexible in how it dealt with students, and also in allowing transfers. He also called for a widening of the curriculum and for an improvement in monitoring of retention.

Despite the focus on selection and the student, there was some interest in solutions that changed the institution. Early evidence is in the form of research that canvassed the opinions of students. For example Cooper (1928) who after identifying some important variables associated with dropout, asked students what types of changes they would like to see:

The suggestions by students for improving the conditions for the university freshmen in order of frequency are as follows: smaller classes; more personal relation with the teacher; more first hand vocational courses; more freedom of expression and discussion in classes...(p 29)

The potential role of the classroom in dealing with retention issues was clear, and Cooper went on to list other notable suggestions such using fewer 'uncompromising' professors and placing less stress on grades. Similarly in a national study Iffert (1958) revealed student that students wanted more contact with faculty, and smaller class sizes, and later McGrath and Braunstein (1997) suggested small class sizes amongst a number of solutions. These themes were given additional credence as a result of the explanatory models that were developed. Spady (1971) for example concluded that

It is clear from our findings that the intrinsically rewarding aspects of these activities, plus the establishment of personal contacts with faculty as well as peers, are fundamental components of student integration, satisfaction and commitment. ($p \ 62$)

Tinto's (1975) extension and development of the model brought into sharp focus the potential importance of integration and how this occurred. Subsequent testing (Munro 1981; Pascarella and Terenzini 1980) reinforced this construct as variables related to issues of contact with faculty, contact with peers and the learning environment consistently proved to be the main contributory factors in student integration. Tinto (1982: 697) himself was clear on what was required in order to enhance student integration. Institutions needed to create the conditions that enabled faculty-student interaction, that provided space for students to interact with peers and that maximised student academic success.

Another emerging theme was based around the process of retention activity itself. This includes operational activities that generally support, enhance and in some cases enable retention programmes. There are two areas covered here, early intervention processes and data collection and analysis. In the UK despite the paucity of research in retention, there was a recognition of the importance of early intervention. For example Heywood (1971) in his report on retention notes the use of academic early warning systems in several institutions, and the actions taken in terms of counselling and support. There are issues about when the intervention should take place and who should be counselling the students, but nevertheless there is an indication of the need to address the problem. Similarly Wilson (1972) in an investigation of academic fails at Aberdeen strongly recommended a counselling service that could intervene early and help guide students who are not sure. He also suggested that such a service could also act to guide students into other careers if they found university unsuitable.

Later research, in particular the predictive studies also addressed these two process issues. McGrath & Braunstein (1997) focussed on the process of assessing retention and monitoring the effect of retention programmes and Tharp (1998) specifically

argues for the use of retention data to enable early intervention particularly for student experiencing problems. All this is located within the context of an effective data development and measurement system that allows the establishing of benchmarks and targets. Early intervention was closely tied to the identification of students that needed support and was an issue addressed by the many predictive studies on retention (De Rome and Lewin 1984; Heverly 1999; Nichols et al. 1998; Ott 1988; Ryland et al. 1994). Whilst most of these works produced a variety of solution recommendations, the focus was to try to predict who would drop out. In some cases, for example Nichols et al. (1998), prediction tools were developed and tested and that had immediate practical potential.

An example of practical work driven by the recognition locally that there is a retention problem is the report produced by Demitrof (1973) at the University of Iowa. What is interesting about this type of practical work is the way in which the process of retention improvement is included as well as content. In this case Demitrof points to the need for better information about why students leave suggesting a way of garnering such information is through effective exit interviews rather than relying on records. Also he points to the need for effective systems that can help identify students who are at risk or having problems. In terms of specific programmes to address retention they include credit bearing career choice programmes, student mentors and pre-arrival (summer) orientation programmes, skills support and extended counselling services. He also provides plans for experimenting with supplementary sessions built into existing programmes. Demitrof summarises by emphasising the importance of all staff being aware of the issue in order to contribute. Studies such as this echo the comprehensive studies of dropout and solutions that we find in texts that emerged from the mid 70's. Astin (1975) for example as well as providing a thorough summary of dropout findings, makes a raft of suggestions covering several areas. Student involvement is seen to be particularly important and any programmes that generate said involvement are deemed as useful. Astin lists academic programmes, orientation, counselling, skills support, and support services such as employment counselling, and housing support. The idea of comprehensive solutions later manifest themselves in campus wide cultures that were student focussed, for example such as that at Appalachian State University (Petschauer and Wallace 2005).

The early research on student retention has produced a number of solution themes. These include selection procedures to ensure the 'right' students attend university (right in the sense that they are most likely to succeed), but other key themes include pre-entry counselling, and after students arrive; orientation; psychological counselling; academic advising, and even from an early stage the recognition that the relationship between student and faculty was important. Additionally several point to the need to identify problems early and finally but perhaps critically there was a tacit recognition that widening participation meant that institutions may have to change the way they carry out their core activity of teaching. In the next section the research on solutions to retention are presented, based largely on the themes identified here.

3.2 Retention solutions: policies and programmes

The last section indicated a wide variety of solutions to retention, but there remains little in the way of theoretical frameworks for categorising these diverse solutions. Beatty-Guenter (1994: 115) do provide a useful categorisation of different retention policies and programmes based on four strategies; sorting; supporting; connecting and transforming (table 4).

CATEGORY	STRATEGIES/policies			
SORTING	"Best-fit" admissions, Entry assessment and placement, Program/course planning, Early warning/academic alert.			
SUPPORTING	Child care, Financial aid, Health and Wellness programs, Security and transportation.			
CONNECTING	Student activities, Student groups, Peer programs, Orientation, Faculty/student events, Attendance policy, Faculty advisors/mentors, Work-study.			
TRANSFORMING	Learning assistance, Tutoring, Remedial education, Goal career and curriculum change counselling, Community building and teaching environment, Policy changes, Instructor development programs.			

This list is quite comprehensive and is neatly classed into the strategy the programme is intend to deliver, and whilst there is a sense of timing it is not linked specifically with the student life-cycle. There is some hint at timing of when these programmes occur although early warning for example which is classed as a sorting strategy can occur at several points both pre and post-arrival. Table 5 presents broadly the same solutions but places them into time based categories and draws on a chronological list of solutions provided by McGivney (1996: 121-168). The 3 pre-in course solutions follow chronologically, and these are followed logically by the in-course solutions. The in-course solutions are categorised by four types; support services; bolt-on solutions, institutional change, and process support.

Point in student life-cycle	Strategy/policy/program						
Pre-application	Recruitment, selection, marketing						
Post-offer	Communication, online engagement, information, pre-entry summer school						
Arrival and induction	Induction, orientation						
	Support	Counselling, student services, finance, housing,					
-	Bolt-on Solutions	Personal tutors, peer mentors, experience/orientation course, academic skills support, supplementary instruction, study groups, social groups.					
In-course	Institutional change solutions	Learning episode redesign, curriculum design, faculty training/education, management and organisation, cultural change					
	Process essentials	Attendance monitoring, early warning systems, data collection,					

 Table 5 Common retention strategies by point in student life-cycle

A further important distinction between table 5 and table 4, is that table 5 identifies solutions in terms of what is being adapted. Two categories stand out as focussing on helping the institution adapt, institutional change and process essentials. These are embedded in table 4, in particular in the transforming category but it is not explicit as

to what is being transformed, here although the implication is that it is the student. The structure thus developed in table 5 can be used as an analytical framework for the investigation of specific research on solutions to retention.

3.3 Addressing retention before classes start

Table 5 indicated that there were several types of programmes and initiatives that could be set in place even before a student had started the application process. It is split into 3 progressive stages, pre-application before the student applies, post-offer which covers the period after a student has accepted a place and finally the induction period, normally the week before classes start.

Pre application

Even before students apply for university there will be a myriad of influences that can shape subsequent application behaviour. The key players in this early process are government, schools, parents and the institutions themselves. The government can have an impact through its policies on WP and funding proposals, both of which may have an impact on retention at a systemic level. Schools and parents have a more direct impact in influencing student application behaviour. School leavers are increasingly being expected to attend university and this pressure inevitably means that some students will attend against their wishes. Again this is not a new issue, Yoshino (1958) recognised it and attributed significant dropout to it, but it does seem to be a phenomenon of increasing participation.

The institutions themselves can influence student behaviour through the use of marketing, a tool that has gradually become part of the university arsenal in the context of an increasingly challenging environment. Prospectuses and open days, once simply sources of information for students, are now along with marketing approaches, such as TV advertising, being used to sell the institution as a product to prospective students. Given the pressures of an increasingly competitive HE market, the temptation may be to 'oversell' the institution in an attempt to attract students. The inevitable result is that some students find that the reality does not match their expectations, and subsequently this can impact on retention. The problem was identified in NA some time ago (Habley 1981), but is becoming an issue in the UK as

we move closer to the NA model of HE. Lowe and Cook (2003) for example investigated how student expectations about a number of aspects of university life are met. They suggested that the sometimes unrealistic expectations needed to be addressed before students come to university. Additionally strong staff-student relations should be built from an early stage (students indicated low expectations of the approachability of staff and had these expectations confirmed) and resources should be geared toward intervening early before students' expectations were dashed/realised.

Selection

Because there has been a long history associating academic weakness with withdrawal and failure, selection has always been viewed as a low-cost method of dealing with retention. Lins & Pitt (1953) for example call into question the wisdom of recruiting drop-out prone probation students (students admitted with low hi-school grades). Likewise Shuman (1956) suggests that the recruitment process should be significantly more robust, suggesting the use of entrance tests, but he also acknowledges that applicants need counselling to ensure they are making the right choice and to save them from "..grimly failing at a task for which they were ill-fitted". (p348). Sarnoff & Raphael (1955) also call for a more stringent recruitment processes that should include psychological testing, a conclusion drawn for an indepth qualitative analysis of student behaviour. Slocum (1956) is somewhat more explicit about who should be recruited:

The college provides learning opportunities for capable persons who are motivated to succeed. It should not be cast in any other role. (p 63)

This sentiment was strong in much of the research, perhaps not surprisingly because there was a growing consensus that hi-school grades were one of the strongest indicators of subsequent college performance. In the UK this feeling that the university environment was only suitable for certain students was also evident. Mountford (1957) in relation to the issue of what was considered acceptable wastage rates states:

In judging this issue, however it should be said that it is no part of the function of a university to spoon-feed its students or act as a forcing house for intellectual weaklings. (p 15)

The response in the UK was broadly in line with NA, Kelsall (1963) for example suggests that in order to deal with the problem of attrition then more efficient and effective selection strategies would be needed.

More recent work emanating from disciplines such as marketing have suggested a more integrated approach to ensuring student satisfaction that includes recruiting students that fit the institution by considering a whole raft of student related variables and not just entry points (Schertzer and Schertzer 2004). Even so there is still a hint of selection here, albeit non-academic based. Another useful marketing concept that could be applied to student support is the idea of customer relationship management. The concept is described by Nichols et al (1998) in the context of the development of a predictive tool aimed at identifying students who need support. They state:

Each member of the Enrolments team understands the concept of marketing for repeat business (retention). The current first-tear class is here; it is already a captive audience. Expenditures to retain these students to the second year are much less costly than recruiting a prospective student to the University. (p 35)

This idea is potentially attractive to those institutions that are forced to recruit their students rather than select them. Recruitment and selection strategies are problematic for these types of institutions, mainly because they simply do not have the luxury of being able to select their students. Additionally in the current climate of widening participation, selection strategies are potentially in direct conflict with the ethos and ideas behind the provision of HE for a wider group than selection would suggest. Whilst selection based on pre-university academic achievement is a potentially problematic method of recruiting, we know from research that there are many other characteristics that might indicate dropout likelihood. These other characteristics consist of both background and psychological variables, and in particular much early research on dropout was related to psychological aspects of the student character. Again basing an admissions policy on background variables such as social status, where you live or any of the other many background variables is potentially problematic (although it could be argued that just such a system operates covertly in many institutions here and the US).

Usually institutions that recruit as opposed to those that select have higher absolute dropout rates. This can be extended down to course level in any particular institution. Essentially the more recruiting a course has to do to achieve target recruitment levels then the higher the dropout rate will be. For recruiting courses the idea of recruiting strategy becomes real because often the decision to recruit or not takes place at the coal-face through interview and clearly the types of student applying at this late stage will differ from the student who has perhaps used the traditional route. This situation is a reality for many courses but there is little evidence of the effect of front-line recruitment policy on student retention, nor on the types of student that enter university through these alternative routes.

Post acceptance

Whilst these solutions apply to students who have officially obtained a place to study at an institution, they attempt to engage the student before they actually arrive. Examples of strategies that would come under this general umbrella would be preentry taster sessions, or supplementary session, and Summer schools. Raab and Adam (2005) present a combined programme that includes a summer pre-entry component and then continues with various forms of academic and social support throughout the first year. What is particularly interesting about this programme is the popularity, with three applicants for every place. Participants are selected on the basis of need. These types of programmes are intended to provide students who have been offered places with some form of preparation. Additionally activities that generate early contact and familiarity for the student, such as a letter of congratulations, and other forms of correspondence would be included here. It is essentially creating a customer relationship early and is a common feature in many US institutions where there is much more of a "student as customer" ethos than in the UK and where student integration begins at the point of offer, not at the point of arrival. Despite this there is a growing recognition of the need for early engagement in the UK. An example is provided Keenan (2008) who presents a detailed and engaging programme that begins before students arrive through the use of information technologies and continues into induction where the key idea is to provide as seamless a transition as possible

Induction

It is this very early stage that students are at their most vulnerable psychologically and emotionally. It is essentially the first critical episode in what Tinto (1993) referred to as the separation stage, and non-traditional students find this separation stage particularly difficult (Elkins et al. 2000). Institutions universally recognise this and provide a period of induction in the week before classes start. The content of an induction week has remained broadly consistent for some time. Knode (1931) for example identifies some common content for inductions including; study guides; information on rules and regulations; library tours; registration; social event information and information about available student services.

Induction though has gradually been seen as a potential method of easing the transition shock that many students feel and its potential more as a social integrating mechanism has found favour with many. An early example of this is Brown (1957) who explains how Freshmen were taken on a 2 day residential event along with staff and support staff in order to foster sense of belonging and more recently an example of an intensely planned induction week is presented by Edward (2003). Whilst accepted as essential by most, there has developed a discourse over the past decade or so as to the idea of induction as an event, as it is traditionally viewed, or as an ongoing process that essentially lasts as long as the student lifecycle (however long the lifecycle is for any particular student). The implication here is that students are engaged in an induction process for the whole time that they spend at an institution. Induction week is simply one stage of the induction process, albeit a vital one.

3.4 Addressing retention after classes start

The core activity of teaching normally begins for most students after the induction week, and it is this commencement of key operations that arguably have the largest impact on the student stay-leave decision. Programmes and initiatives tend to be diverse and located and administered at different levels in the institution. In some cases a service may be provided at several levels for example counselling whilst traditionally provided at the level of the institution could conceivably also be manifest within academic schools on a more focussed level. What differentiates 'bolt-on' solutions to 'support solutions' is the increase in immediate problem focus that they tend to have. They are also normally targeted at addressing what are perceived to be immediate student related problems such as integration, academic skill levels and learning skills generally. They are normally administered at a local level.

Support services

Most HE institutions traditionally dealt with non-academic affairs at the university level and as such there has been a tradition of some form of counselling service being available as well as other support services such as finance and perhaps housing. The potential importance and role of student support services in the battle against student dropout has been noted (Thomas et al. 2002) although evidence for its impact and use by students is lacking, as is the evidence for its impact on student retention. Some form of counselling has long been a staple offering, the academic aspect being particularly important for the NA model where many students only choose a major after the freshman year. Early manifestations of counselling encompassed many of the support programmes and ideas for solving retention that we find today, for example Snyder (1936) considered induction, mentoring, and skills support all to be part of a student counselling. Academic counselling would later be the catalyst for emergence of specific academic skills support programmes such as supplementary instruction.

Given the extensive interest of psychologists in retention and the early assumptions that failing students were deficient in some aspects of their psychological makeup, psychological counselling was equally if not more highly considered as a tool for addressing dropout. Rose (1965) for example in an experiment found that students who were engaged in counselling were less likely to dropout, and Frank and Kirk (1975) taking as their sample a whole cohort of freshmen compared users and nonusers of counselling services and found similar results. Certainly when participation was relatively low then such services were not heavily in demand but the emergence of WP has created a cohort of students that is drastically different. These students have a wider variety of needs, and such services are now considered a key part of the university experience offering with an increasing number of students availing themselves of the service (Wilson et al. 1997). Turner and Berry (2000) provide a summary of the contribution of psychological counselling to the retention of students, and point to the increased remit of the service in contemporary HE environments. In their own investigation they again found that persistence was

consistently higher amongst counselled students, although they emphasise that there was little difference in long term graduation rates of both users and nonusers of counselling.

3.4.1 Bolt-on programmes

As already stated bolt-on solutions are programmes and initiatives that tend to be specifically aimed at addressing a particular problem related to retention. The majority of these initiatives are based around helping students academically although some are specifically aimed at integration. The term 'bolt-on' refers to the fact that these programmes are normally offered as open service; that is students usually volunteer to use it. Additionally they are normally, although not always, initiated at the course level.

Peer Mentoring

For students entering university for the first time it can be a traumatic and often lonely experience and small setbacks can have a major impact (Peat et al. 2001). It is no surprise then that the mentoring of new students by their more experienced peers, especially early on, has gained coinage in HE as a way to help ease students through this transitional period. Research has shown that students repeatedly place a high priority on making friends as an objective when coming to university. In a comprehensive review of mentoring in HE Jacobi (1991) suggests that a key problem exists in the lack of an operational definition of mentoring. She goes on to identify common features often found activities to be part of the mentor remit, things such as training, advice, friendship and so on. Peer mentoring can take many forms, and be tailored at particular groups, for example Hutchins and Miller (1979) established an experiment using group advising by teams made up of academics and trained student advisors. Students allocated to the teams generally performed better than the control groups along a number of dimensions, in particular they had better retention and academic performance. Using a very similar programme Dixon and Gudan (2000) report the impact of a programme intended to address the problems experienced by commuting students. The programme called "Peer assisted Learning" actually combined peer mentoring with formal academic tasks so academics worked alongside student mentors in mentoring first year students. Again they reported that programme participants had higher academic performance and lower dropout rates.

Academic support

Academic skills support and advice has a long history of use in HE. It was seen as being particularly useful to address the perceived skills deficiencies that many nontraditional students were entering university with. Because of the association of academic weakness with poor retention, academic skills support programmes became a staple within most HE institutions, and indeed it is rare not to find an established academic skills support unit in any institution. The central idea behind academic skills support initially was to provide students with some of the skills that were required for effective HE level study. The natural urge was to identify students who were considered at risk of having problems and then target these students for support. This model has generally been discredited and replaced by the development model where all students are invited to make use of the service to enhance their performance (Hill et al. 2010). Lowe and Toney (2000) suggest that academic advising has an inconsistent lineage in terms of usage and cites problems with the way in which it is viewed in institutions; often as a minor activity. Coupled with lack of trained personnel, ambiguity about where it fits into institutional operations, and problems with evaluation, it remains of ambiguous value for retention improvement.

Whilst academic skills support tended to focus on the student, other forms of academic support began to address institutional issues. One such approach is supplementary instruction (SI) which according to Kochenour et al (1997) focuses on problem subjects, programmes or modules. Additionally SI normally involves formal group sessions rather than individual targeted help and these groups are often lead by other students. As well as moving the discourse away from the deficiency model, the advantage of this approach is that it potentially provides a community into which students can integrate. The problem remains of course that students are required to opt in, although there may be scope for the provision of obligatory sessions.

Like academic skills, the final manifestation of SI is its integration into the curriculum. This approach according to Congos and Schoeps (1998) has proven to be effective at improving both student performance and retention. SI also potentially

circumvents the oft cited problems inherent in targeting at-risk students in that it avoids the labelling of students as inadequate (Blythman and Orr 2002; Martin and Blanc 1980). Kochenour (1997) et al in their study of the effectiveness of SI across the University of Utah indicate the importance of this feature in helping students to integrate more quickly and develop friendships and other forms of interaction.

University experience courses

The transition into university is a daunting prospect for most students, and particularly for NT students who are exposed to a challenging and unfamiliar academic environment. In response to these issues many institutions in NA have initiated what are commonly known as university experience courses or seminars. The original idea of a university experience course emerged at the University of South Carolina in 1972. Its apparent success was clearly indicated by Fiddler (1991) who in an evaluation of its effects between 1973 and 1988 found significant positive impacts on the retention of students who enrolled on the programme.

The general idea behind experience courses is to equip students with some of the skills and knowledge that would help them through this early transition. The earlier experience courses tended to be thematically similar, for instance Stanley and Witten (1990:345) suggested a number of common characteristics that such courses might have, such as being credit bearing, small class settings, and a content that focuses more on the non-cognitive development of students. As such the types of activities normally found within such courses might include general guidance on availability and access to services, engaging with and access to extracurricular activities, and perhaps identification of mentors. Over time the format of experience courses has changed somewhat and as Hendle (2006:414) suggested can vary significantly based on the mix of academic and non-academic content, how and where the programme is delivered and who is involved. An example is that provided by Noble (2007) where the first year programme included a residential element where participants in the experience course were situated in the same accommodation areas.

Irrespective of the individual peculiarities of different experience courses there is now a significant and stable body of evidence that would seem to point to their impact on student retention, particularly in the first year (Boudreau and Kromrey 1994; Cox et al. 2005; Fidler 1991; Glass and Garrett 1995; Keenan and Gabovitch 1995; Schnell and Doetkott 2002; Sidle and McReynolds 1999; Starke and Harth 2001). This is supported by the evidence of heavy use of such courses across NA institutions although some contemporary work such as Hendel (2006) casts some doubt over the economic cost of such courses by finding only a tenuous link between participation and retention. He also suggests that retention is more affected by the type of student recruited and that evidence for the impact of experience courses needs to be more robust to justify the resource expenditure they imply.

One particularly important theme that recurs consistently is how experience courses can act as a vehicle to develop student mutual support groups, certainly important in NA where the freshman year is typified by large impersonal class sizes. Many evaluations of such courses commit premium space to their interactive and integrative impacts, and are one of the main explanations for the positive outcomes that experience course have on participants (Boudreau and Kromrey 1994). The notion of enhanced learning in smaller groups as a reaction to the problems of the large class sizes experienced in NA, would become increasingly important as part of the general emergence of learning community ideas.

All of the solutions up to this point are aimed at helping the student adapt to the university environment, and as such despite their well-meaning intentions they tend to calcify the 'student as problem' perspective. The next category, institutional change, covers activities aimed at adapting the institution to fit more effectively with the changing student body. Finally process essentials are activities that are deemed as vital operational processes that are necessary to enable and enhance effective retention programmes.

3.5 Addressing retention through institutional change

The idea of student integration is heavily dependent on, and linked with the concept of interaction between the student and the institution and between the student and their peers. Some of the programmes and solutions outlined in the previous section contain elements that may facilitate one or both of the types of interaction. Peer mentoring, skills support, and personal tutoring/mentoring can go someway toward
fostering contact with faculty, and academically related programmes such as SI, experience courses and academic skills support can to some extent enable interaction between students and staff and between students.

The focus though is on the student and the requirement that they change, but there has been a growing recognition that perhaps the change should occur not with the student but with the institution. Whilst recently gaining coinage (Jacklin and Le Riche 2009) it has long been recognised that institutional change may provide a useful solution to retention. Even in the UK where interest in retention was relatively sparse, Fulton (1977) provided a concluding argument to his pseudo-synthesis study of retention in the UK that would not be out of place in any contemporary work on retention:

But it is all too easy for universities, whose teachers have been, after all, some of the most successful students under the existing system, to assume that the student must be made to fit the institution (or drop out), rather than adapting the institution to fit the student. This should not be taken as an attempt to "reduce standards", although academic standards are, perhaps more useful as slogans than as immutable benchmarks. But increasing psychological understanding of the different learning strategies and capacities of students coupled with an awareness of the steadily widening variety of jobs which graduates now occupy, surely suggest that a greater flexibility in teaching might be desirable. (p28)

Attitudes of academics, the acceptance of widening participation, and the key element of teaching are all evident here. It is a notion supported by Berger and Milem (1999:662) who suggested that in order to seriously address retention we need to find ways of matching the institution culture with that of non-traditional students. The recent overt emergence of an adaptation discourse has raised the opportunity to directly investigate potential for making changes to the institution. Zepke and Leach (2005) argue that institutions should adapt in order to embrace diversity. They state:

Central to the emerging discourse is the idea that students should maintain their identity in their culture of origin, retain their social networks outside the institution, have their cultural capital valued by the institution and experience learning that fits with their preferences. (p 54)

They go on to suggest that key elements of this cultural change would likely be curriculum content, teaching methods and approaches to assessment. This theme of embracing diversity by developing inclusive practices and changing the culture of the organisation is also evident in schools. Ainscow (2005) for example argues for a change in the dominant discourse in order to enhance inclusion. Four key elements are seen as being central to this; inclusion as an ongoing process; removal of barriers; the achievement of all students, and a focus on those at risk of being marginalised.

The focus of integrated approaches can be on changing the structure and in particular the culture of the organisation itself, and over time a general consensus has built up that retention practice needs to be built in to the normal operations of the institution (Tatum and Rasool 1996). This can be achieved in many ways but there is a growing consensus that the focus needs to be on the classroom. Tinto (1993; 1997; 2000) stresses the importance of the classroom not only as a key dimension of academic performance, but also as a platform for social interaction and faculty contact both in and outside class. The importance of informal contact was made clear by Seidman (1991) who suggested that faculty staff needed to be made aware of the critical importance of engaging with students, not just formally, but also on an informal basis. Kuh and Vesper (1997) in an investigation of students experience centred their study on all three key issues of staff-student interaction, peer-cooperation, and active learning. They found significant links between outcomes and high scores in each of these three areas and recommend policies that can enhance each of these good practices.

Teaching as a solution to retention encompasses a number of potential areas, from the individual teaching styles of academics to the structure of delivery and the environment in which that delivery is enacted. This holistic perspective of curriculum design is suggested by Crosling et al (2008:4) as a way to engage students both academically and socially, and consists of areas including curriculum design and content, assessment, structure of teaching delivery and interaction with academics. It remains an enigma that throughout the history of research on retention, frequently the issue of teaching methods and structure of delivery have been raised by students as key issues influencing satisfaction and yet the teaching methods and delivery environment remain constant in the form of the large lecture.

There have been more consistent calls for the structure of the learning environment to change, Braxton et al (2000) call for a move to smaller classes and also point to the

need for academics to be trained in using such methods. Drane et al (2005) found that when students worked in smaller groups this tended to have a positive impact on their performance, and they argue that this counteracts the problems commonly encountered in large lecture environments. Similarly Glogowska et al (2007) suggest that universities need to adapt to student needs and central to this is the opportunity to work in smaller groups which would allow interaction with tutors, reflection and problem raising. In particular they indicate the need to break large lecture groups down into smaller units. This, it is argued, would generate informal peer support and a sense of identity within the cohort. This idea of integration is given full vent by Cartney and Rouse (2006) who offer the benefits of small groups as a way of enhancing the integration of non-traditional students. Furthermore they argued that the discourse is moved away from the student deficit model toward one that views the key process of teaching and learning as the problem.

Whilst there has long been a recognition of the problem of the structure and cultures and particularly teaching within HE, there remains little evidence of the effect of changing the institution on retention rates. This may be due to a combination of issues for example the difficulty of directly associating institutional change with retention, the relatively recent focus on the issue, and the natural resistance in HE of academics to teaching changes. There are some examples though, McShannon et al (2006) for instance provide an evaluation of an institution wide initiative that focussed on changing the way academics taught. Participating academics were helped in using techniques such as in-class exercises, question and answer approaches and student interaction. On the courses of participating academics, average first year retention went from 71.4% to 77% and average student performance from 71% to 78.9%. Similarly Wolff et al (2008) indicate how addressing the organisation, curriculum and teaching on one particular course produced improved performance for foreign students.

3.6 Processes that support retention efforts

Earlier in the chapter it was suggested that an integral part of retention solutions was provided by certain operational support activities. There is very little research that specifically addresses key operational activities that support retention, although much of the policy level research especially related to enrolment strategies include data collection and its use as an important prerequisite supporting retention programmes. Similarly early intervention, whilst not recognised as a retention solution itself, appears throughout the research as an integral part of most programmes and solutions and in many cases is the central concept.

Retention data

Data and information has been a key aspect of research on retention (Klepper et al. 1987; Quality Assurance Agency for Higher Education 2008). It is a central part of persistence research where both primary and secondary data is collected as part of the natural empirical process. There is another aspect of retention data that is less evident but is equally important in retention issue, and this is how data and information is used at a more strategic level in terms of policy, and in the evaluation of retention programmes. Astin (1975:181) for example suggested that institutional research was essential and that longitudinal databases needed to be established.

It would seem axiomatic that policy decisions taken within the institution should be made on the basis of effective and accurate information. Much of the work that suggests strategic institution wide approaches and solutions to retention, naturally include within that array data collection and information about retention. Johnson (1997) emphasised the importance of retention related data both for ensuring institution wide recognition of retention issues and also as a way of identifying trends in retention. The relationship between data use and the effectiveness of individual programmes is emphasised by a number of authors, for example Mantano et al (2005:1123) emphasised "management by data" as being a key element in improving student advising, equating its importance with the approach taken in the commercial world. Buglear (2009: 383) was similarly insistent on the importance of retention data, but suggested that the data that does exist is both in short supply and unreliable.

Research based on predicting student retention frequently makes reference to the importance of data collection and databases generally, predicated as they are on the use of effective data. Tharp for example (1998:291) outlined the importance of data as a benchmarking and target setting instrument for the institution. McGrath and

Braunstein (1997:396) argued for local data to be collected in order to facilitate and support local solutions. The argument is that local data will be more representative and reflect local structural and cultural conditions. Whilst data collection is central in the development of predictive tools that can identify for example students at risk it is also tied in to the concept of early warning (Beck and Davidson 2001).

Early warning and intervention (EWI)

At the operational level many aspects of data collection are strongly linked to the concept of early intervention. Like data collection EWI is rarely presented as a solution, although there are rare examples of it playing a pivotal role in the retention of sudents (Fitzgibbon and Prior 2006; Prescott and Simpson 2004). EWI can be manifest at several levels in the organisation as indicated in the student life cycle diagram of solutions. During the period before acceptance of a place by the student EWI could be interpreted as providing accurate information to students in order to mitigate against the subsequent gap between expectation and experience of students when they arrive. When student have accepted places EWI takes on a different form and objective. Initiatives include making contact with students in order to initiate the integration process earlier. Tools include social networking and also pre-start summer schools. The objective of intervening early in all of these cases is to ultimately reduce the impact of transition shock, and it also may have the effect of increasing general awareness of potential problems.

It is when students actually start classes that EWI takes on a somewhat more specific and intense form. It is from this point that issues such as academic weakness, and problems related to social integration begin to emerge, as well as problems stemming from external issues. Academic problems normally become evident in a students' performance and the data that can support this are clearly available and often the basis of early intervention programmes (Mann et al. 2004). Students with other nonacademic issues are less easy to identify, they are what Bowen et al (2005:376) refer to as 'silent withdrawals'. For these students often non-attendance is the only indication that there may be something wrong.

Some research commonly refers to intervening early in order to solve problems. Snyder (1940:32) for example suggested that a significant number of failing or withdrawing students could be saved through earlier "therapeutic work", and likewise Sarnoff and Raphael (1955:372) canvassed for early intervention and ongoing support. Shuman (1956:349) argued that certain student behaviours are indicative of potential problems, including non-attendance at class and that all staff needed to be on the lookout for these. Authors were still calling for earlier intervention 40 years later, and there was an increased recognition that this may need to be more intrusive and/or occur before it was too late (Beck and Davidson 2001). Intrusive intervention was being seriously considered because of the nature of student avoidance behaviour (Hermanowicz 2006:36-37; Rickinson 1998:100), and because of a changing HE environment where retention was high on the agenda (Walsh et al. 2009: 421). Eaton and Bean (1995:640) pointed out that it is the students who need help that most often avoid seeking it out and that any effort to intervene with these students needs to be sensitive.

Many of the studies that used data to predict student retention naturally included elements of EWI, for example Davidson (2001). Some extended the concept to develop systems that could signal intervention such as Nichols et al (1998) who used predictive data to target students for checkups at set periods during a term. similarly Glynn et al (2003) used predictive data as the basis for an intrusive intervention system that was subsequently used and arguably improved retention. Wild and Ebbers (2002: 516) were specific in not only calling for an early warning system, but also a process and mechanism to intervene and Hermanowicz (2006) went further by suggesting the main criteria for potentially successful retention improvement:

....appears to be sustained contact and interaction with new students who can be appropriately directed when concern arises in them. (p 37)

This implies not only identifying students with problems or potential problems but also actually doing something about it. Ozga and Sukhnandan (1998:332) suggested a raft of interventions including better record keeping and use of active learning and formative assessment. The focus was on the first year and on academic issues, as most EWI interventions seemed to be. The problem with use of academic weakness as a trigger is that it needs to target students (already outlined as more problematic in the UK where there is little culture of early intervention), and very often academic problems take time to surface.

One particularly useful, although rarely considered tool to support EWI, is that of attendance. There has been some recognition though of its potential use, for example Elkins et al (2000: 264-265) briefly alluded to the potentially usefulness of attendance data, and Presott and Simpson (2004: 251) argued that the ability to identify students at risk is an inherent strength of attendance monitoring. Some recognised the value of attendance such as Budig (1991) who in an evaluation found that students with higher attendance had higher performance and were more likely to persist. Although there was no suggestion of attendance being used as a tool of early intervention, the benefit of improved attendance was shown. Fitzgibbon and Prior (2006) include attendance monitoring in the first two "zones" of institutional action areas, but interestingly it disappears as a key area of action after the first 6 weeks. Smith and Beggs (2002:1) acknowledge the importance of absence as an indicator of likely withdrawal and respond with an aggressive combined attendance monitoring and intervention system. They then used this system to identify students at risk and initiate intervention. They also logged reasons that students gave for missing classes and found absence as being the biggest impact on failure.

Whilst it appears that attendance monitoring may provide the most effective EWI approach there remains little evidence of its use in such a role in HE. Limited evidence for the impact of attendance monitoring on performance is provided by Parmar and Trotter (2004:163-164) who identify it as one of the policies used by courses that have higher retention rates. The problem with this of course is that there may be other structural variables associated with a course that could account for the retention performance. There may be reasons for the lack of evidence, for example Buglear (2009: 386) found that academics had little faith in the accuracy of attendance lists and Holifield and Heatly (2005) suggested that attendance monitoring is not traditionally carried out in HE anyway, unlike schools where there is a legal requirement to do so. They go on to outline the benefits of using a formal attendance monitoring system for early intervention but set out the conditions for effective use:

The value of this data depends on accurate and timely input, and the cooperation of all tutors. The usefulness of the data depends on the actions taken using it, hence a policy for identifying and dealing with "at-risk" students is necessary. (p 1757)

Whilst this suggests the technical requirements and policies that need to be in place to support attendance, it stops short of dealing with a fundamental aspect inherent in EWI and that is engagement with students. Endo and Harpal (1982) who found that the quality of interaction between student and faculty was vital extend the argument that the interaction needs to go beyond the formal:

Interaction must also be characterised by a certain quality. Students respond to informal interation more than just advising. That is to say, friendly contacts which operate at a more personal level and cover a broad range of issues have a greater impact than contacts which are perfunctory and limited to specific academic and vocational topics or requirements. (p133)

3.7 Benchmarking best practice

An infrequent but potentially useful approach to take in identifying effective solutions and programmes is to analyse the activities and policies of what are deemed to be successful institutions in term of retention performance. Clearly the first stage of such investigations is to identify performance dimensions and then to identify institutions that excel in those performance dimensions.

In the UK Yorke and Thomas (2003) use such an approach and identify their good performers from HEFCE statistics on participation and retention. They identified six institutions that outperformed similar institutions in the industry. Their approach was to talk to senior managers who were involved with retention in order to identify some commonality in terms of policies and activities. They found that often the interviewees found it difficult to identify what attributed to their success but the most common unifying theme was a general commitment to the student experience evidenced by being teaching focussed, engaging with student early and involving staff. Other activities mentioned include curriculum development, personal tutoring, induction activities and frontloading resources for the first year, but often these were mentioned in isolation.

A similar approach was taken in the US by Kuh (2005) but on a large scale. He identified a number of high performing HE institutions based on data from the National Survey of Student Engagment (NSSE) and on graduation rates relative to competitors. This project revolves around what are identified as effective educational practices and a common theme is a commitment to student learning through culture and structure. The constituent parts of this overriding approach are individually exemplified in the 20 institutions in the text. Both these approaches are somewhat strategic in outlook and whilst providing some useful indication of the nature of good practice they tend to be general.

At a more operational level a similar approach might be useful where instead of comparing institutions one compares courses and just such an approach was taken by Parmar and Trotter (2004). Acknowledging the challenges in terms of methodology and interpretation posed by the large scale comparisons, they compared the experiences of students and staff on both good and poor performing courses in terms of retention. The activities and programmes engaged in by the successful courses are largely in line with the list of solutions presented previously in this chapter, from preentry information and student preparation through to teaching and delivery methods. Significantly they found that the better performing courses were more likely to use active teaching methods rather than traditional lecture, and also that attendance monitoring was more widely used.

This approach to identifying good practice may provide some serious challenges in terms of identifying specifically what it is that accounts for the retention performance of an institution or course. Notwithstanding this there has developed from these and other studies a synthesis of what seem to be useful practices in dealing with retention problems (Dennis 1998; Feldman 2005; Gaither 1999; Kuh et al. 2005; Lenning et al. 1980; Moxley et al. 2001; Noel et al. 1985; Seidman 2005; Tinto 1993; Upcraft and Gardner 1989). These come largely in the form of extensive edited volumes and books and tend to present a compendium of solutions that together are now more commonly referred to as enrolment management. Whilst the individual solutions might vary there is nevertheless an overriding set of themes that can be condensed into some useful guidelines. These revolve around defining and measuring retention, identification of at risk students and operational intervention, provision of diverse

programmes to support various types of students and most fundamentally the development of student centred institutions.

3.8 Summary: From student focus to institutional focus

Research on what solutions might be effective is increasing in volume and like the continuing research on why students leave a consensus has been building on how effective each of these solutions and programmes might be. A rudimentary framework based on the timing of programmes was developed bringing some cohesion to the often diverse nature of retention solutions. This indicated that institutions can potentially begin to impact retention from an early stage, but that most impact is achieved after students arrived. In-course solutions have further been divided into 4 categories with most research being related to the provision of support and bolt-on programmes. It is these two areas that also provide the bulk of evaluation. Also there is a recently emerging discourse on the possibility of adaptation by the institution in reaction to a recognition that perhaps the fundamental problem lay with what academic institutions do, how they are organised and in particular how students are taught. Whilst this shift is perceptible, and there are calls to move to this approach to supporting students, there remains no evidence of the impact of institutional change on the retention of students.

4.0 SOME PROBLEMS WITH EXISTING RETENTION RESEARCH

Chapters 2 and 3 present a picture of extensive research, although the focus until recently has been on understanding the reasons for poor retention. The reason for this predominance is in no small part related to the nature of the research questions asked in each. Investigating why students leave or fail has provided a fertile environment in which researchers can apply different perspectives. It is a phenomenon that lends itself to being analysed, understood and explained and history has shown that there is no shortage of interested parties willing to engage in such work. Research on solutions is somewhat more challenging because it revolves around evaluation, and demands the deployment of resource intensive methodologies and potentially complex experimental designs. Furthermore there is a practical problem related to how the various retention solutions and programmes are implemented and managed. In this chapter both aspects of retention research are analysed in terms of the problems and issues that have emerged. The conclusion then prepares the ground for the methodology used in this thesis and is intended to directly address some of the existing problems in retention research

4.1 Problems with dropout research

A large proportion of research on why students fail or withdraw makes use of quantitative data collected normally through various types of surveys and questionnaires, or it is student related data that is extracted from university systems. Investigating the reasons why students leave is usually done through surveys in the form of questionnaires or through the interrogation of standard institution exit forms that leaving students are normally required to complete. The main problem with the institutional exit survey is that often students do not fill it in. McNeely (1937:50) for example noted in his large scale study of retention that on average 45% of withdrawing students failed to provide a reason, or the reason was unknown. Reference to the studies and data in table 3 that rely exclusively on institution records clearly indicate the no reason category features in the top two, and often account for over 50% of withdrawals.

To be fair very few studies rely exclusively on institutional documentation and prefer to develop a combinatory approach that draws on data from both sources. Whilst surveys can be specifically tailored, even relatively sophisticated questionnaires intended to solicit multiple reasons for withdrawal find it difficult to present the inherent complexity of the withdrawal process. The structured nature of the questionnaire and the tendency for students to not give a true response often means results are unreliable. It is a problem recognised by many researchers. Snyder (1940) for example suggested that reasons such as illness may be a 'blind' for other reasons in particular for dissatisfaction with aspects of the institution. Similarly Malleson (1963) in the UK pointed out that students might use similar reasons to cover for inability to manage the academic rigours of a course. This problem seems not to have disappeared as evidenced by Thomas et al (1996) who at the summation of their study, acknowledge the serious limitations of post-hoc studies. The reason why students might not provide the 'true' reason for leaving is revealed by Marsh (1966) who suggested that students having problems were likely to be too pre-occupied with their current situation than to provide a truthful evaluation of what could conceivably be a traumatic process. Mckeown (1993) provides a convincing rationale for why students respond in the way they do:

Students, like other human beings, have at their disposal a set of "appropriate" answers which are used in particular contexts. These often reflect what is generally seen as desirable, rather than the actual priorities of the individual as revealed in behaviour. (p 81)

Often the responses students give in standard exit surveys can differ substantially from reasons elicited through designed questionnaires (Rump and Greet 1975) indicating the potential dangers of relying on such instruments. Rump and Greet also point out that standard university exit forms are normally limited in the available reasons for withdrawing and rarely if at all include the opportunity to express dissatisfaction with the institution. Some researchers have specifically attempted to address this problem, Demos (1968) for example had qualified counsellors exit-interview all dropout students after they had filled in an exit form. In comparing what the student presented as the reason for leaving with what the counsellor elicited from the interview there were some clear differences. Fundamentally students used reasons such as needing employment to cover for problems such as low motivation and/or difficulty coping with the academic work. He went on to point out that little

importance was attributed to the achievement of low grades as a reason for dropping out, suggesting that low grades occur as a result of the problems the student was having.

The changing emphasis from blaming students to the institution enabled students to be questioned about their experience with university processes. The suspicion was that perhaps students were leaving or failing as a result of institution related issues and this could be investigated through the student experience. Whilst useful in redirecting the focus of blame from the student to the institution, the method of researching such issues provided particular challenges. The key problem lay in the responses of two groups, students who stay and those who leave. Invariably research that compared the experiences of both groups found that students who stayed gave higher satisfaction ratings than those who left (Christie et al. 2004; Heverly 1999; Johnson 1994; Johnson 1997; Starr et al. 1972; Steele 1978). Furthermore the problem extended to interaction between students and staff. Miller and Brickman (1982) for example cite findings from Lenning et al (1980) indicating lower levels of interaction and satisfaction for leavers. There is some acknowledgement of the potential weaknesses of such approaches, for instance Yorke (2000) comments that responses from withdrawing students cannot be taken as representative of all students.

Whilst a seemingly attractive option compared to just concentrating on leavers, the comparative approach is clearly problematic when investigating causal effects of the institution on retention. This issue of potentially unique conditions or circumstances at a local level can have implications for the reliability of systemic level investigations of dropout. That there are differences between institutions is acknowledged, but there are also potential differences within institutions, a point well made by Patrick (2001) who used multi-level modelling to indicate these differences, and at the same time called into question the usefulness of league tables.

There is a final problem inherent in the actual act of creating a questionnaire-based survey. Irrespective of how the questions are constructed, and what emphasis is provided, it gives the unhappy withdrawing student the opportunity to vent their anger. Thus if you provide a question asking about satisfaction with teaching it will be answered in the negative, in fact any category will be answered this way. Give a student the opportunity to use a category as an excuse and they will take it, and this is particularly the case with variables related to the institution. In cases where interviews are used this provides less opportunity for students to blame the institution and indeed studies that use this approach, institutional blame rarely arises (Yoshino 1958).

Because time is often limited, the most common methodology utilised is the crosssectional type of study. Student non-completion is overwhelmingly viewed as a highly complex and temporally-based phenomenon, and the use of the cross-sectional study is highly problematic. Astin and Lee (2003) focus on this issue suggesting that the research in this area has tended to concentrate on what they term as "one-shot" methodologies. Of more concern though is the way in which the results of such work are used to influence policy and to make comparisons between institutions. Their solution is to ensure that student entering characteristics are taken into consideration so that changes can be identified. Other research has specifically called for more longitudinal approaches, Jex and Merrill (1962) for example emphasised the need to move away from the *ex post facto* approach to one that accepts the longitudinal characteristics of the dropout process so that dropout can be studied as it is happening. Terenzini (1982:61) points out that although the longitudinal methodology is superior, it is resource hungry and requires experienced researchers.

A close compromise has been to perhaps survey students at given times during a period, such as the path analysis approaches. Other attempts to capture the complex nature of the problem would include efforts to identify critical points in the student life cycle for intervention. For example Fitzgibbon and Prior (2006) identify critical points for the student in year one. Whilst these approaches may go some way toward providing a more longitudinal perspective, they nevertheless require an extended commitment to the project by the researcher. Whilst more extended studies of retention may be desirable, Brower (1992:451) points out that few policy makers would be willing to wait so long for recommendations to address such an immediate problem as retention.

These post-facto type studies provide little in terms of an in-depth understanding of the process of dropout, giving us just characteristics of students that might indicate dropout prone-ness. Additionally students are often asked about issues that occurred some time before the survey, for example when the sample is of students who had left the institution. The problem is raised by De Rome and Lewin (1984) who point to the potential reliability of asking students to recall feelings and attitudes from periods in the past.

4.2 Solution research problems

The predominance of research that focuses on reasons why students drop out, and that additionally draw on the models of Spady and Tinto is an issue that has not gone unnoticed. Pantages and Creedon (1978) for instance call for colleges to "Shift their attention from prediction to the prevention of attrition" (p94). Similarly Lenning et al (1980) conclude their synthesis text thusly:

One obstacle in retention research has been that the same kinds of research continue to receive researchers' time and energy far after it has become clear that more replication and generalisation studies are unnecessary. (p 101)

It is a sentiment that Noel et al (1985) reflect on as they suggest that attrition is an area that had been "vastly overstudied" and was in need of serious research on solutions. Despite periodic calls for more research to be undertaken on the effects of solutions on retention (Christie et al. 2004; Pantages and Creedon 1978), it remains a relatively infrequently studied aspect of retention. The research on retention solutions that does exist comes under methodological criticism with Levin and Levin (1991) for example criticising the standard of evaluative research. They argue that studies were often too general and rarely displayed the level of academic rigour required in scientific research. A similar criticism was made even more recently as Patton et al (2006) identified the general lack of effective evaluation of retention programmes. Although the volume of solution research is increasing, it too has associated methodological problems.

The problem of cause and effect.

The previous chapter provided some evidence of association between the retention of particular groups of students and participation in, or exposure to particular retention programmes and initiatives. A common characteristic of the majority of this evidence is that it is based on low level operational units in the institution, for instance a particular course, or a small sample of the institution population. Within the public arena, retention performance is normally presented at an institution or systemic level. Where this data is presented longitudinally, it is difficult to associate any changes in performance with particular policies, strategies, initiatives or programmes. For example Yorke and Thomas (2003), when investigating six institutions that performed above their benchmarks in retention, found that retention professionals themselves in those institutions could not identify any particular initiative or solution that could account for their above benchmark ability to retain students.

Evaluating the impact of programmes on systemic retention performance presents some serious challenges. This arises because most retention initiatives are normally implemented at a micro-level, but retention performance is more often than not presented at a more macro level. Thus it is very difficult relating specific programme effects to changes in systemic retention levels. The problem is aptly presented by Zepke and Leach (2007:240) who argue that the small improvements in retention performance observed between 2003 and 2006 in the HE sector in New Zealand could not necessarily be attributed to government policy decisions. They suggest that the improvement may be both unsustainable and additionally the result of other factors.

It is an issue identified by Heverly (1999) when she refers to the usefulness of the integration models to indicate the possibility of appropriate solutions. There was a realisation that valuable though the models had been in creating understanding in particular in the areas of integration and faculty contact, they fell short of enabling effective action to be taken because the problems were beyond the control of the institution. In noting the research contributions of Spady and Tinto she says:

Such findings helped the college community appreciate that student retention is related to the quality of staff-student and faculty-student interactions. Yet the general global nature of the findings made it difficult to translate them into specific, high leverage actions likely to have an impact on retention. (p 5)

In identifying that students wanted improvements in information and communication, she suggests that the institution responded and posits that this may have been instrumental in increasing retention from 61% to 64% across the campus. This is potentially a rash claim based as it is on a comparison of just two time periods and is

indicative of the problem generally in retention research of associating particular solutions with retention outcomes, in particular where the evidence is presented at strategic levels. Fitzgibbon and Prior (2006: 26) claim that use of an integrated retention initiative had reduced attrition from 25% to 12% on the business programmes. This was based on a two year period that the programme was in place, but again there was no explanation of how attrition was measured nor were figures provided for periods before or after, or for other programmes in the Business School as a whole. (It had been stated that the programme was initiated in the schools of Human and Social Science and in the Business School).

Edward (2003) also presented the problem of cause and effect in finding that end of year retention was unaffected by the implementation of a rigorous induction programme. The programme had been developed in direct response to a survey where a significant number of withdrawing students had cited poor induction as a reason for withdrawal. Similarly in revealing the University of Manchester Institute of Science and Technology (UMIST) approach to addressing retention, Tomkinson et al (2002:212) suggest that even where improvements are evident in course retention it was unclear whether this was a result of retention initiatives or if it would have occurred naturally. In some areas of solution research there seems to be a lack of any attempt to even evaluate the impact of solutions on retention, for example in the investigation of peer mentoring, a point repeatedly made by Campbell and Campbell (2007; 1997).

It seems that the result of this lack of evidence for what works has resulted in what Johnston (2002) refers to as a "push all buttons" culture. This less than robust approach to addressing retention makes it difficult to associate any particular initiatives with observed changes in retention performance. An example of just this type of approach is provided by Blythman and Orr (2002) who relate the development of a multitude of programmes and culture changes covering almost all aspects of retention solutions and then fail to provide any indicative performance data in order to evaluate the quite extensive time and effort.

Evaluation problems

Whilst there is a developing received wisdom on what solutions might work, and indeed whilst there is a growing consensus on the relative effectiveness of each of these solutions in isolation, there still remains little empirical evidence of the actual effect on student retention. The core reasons perhaps lie in the difficulty involved in obtaining such evidence, and arguably with the difficulties involved in defining and measuring retention. Evidence needs to be collected through the impact that a solution has on the key bottom line performance measure, i.e. that of student progression or retention⁵. In order to do this implies the use of classic experimentation methodologies.

In the past the idea of deploying classic experimental methodologies in education was less ethically challenging than it is now, and there are examples of laboratory type experiments that evaluate various types of retention solution (Freeman and Jones 1933; Hutchins and Williams 1979; Rose 1965; Stegman 1969). The advantage of the laboratory experiment is the ability to control membership of the experiment and control groups. This contributes to reliability and validity and whilst there is little danger from self-selection issues there may be other threats to reliability. One such threat comes in the form of the Hawthorne⁶ effects which stated simply suggest that subjects of experiments will behave differently simply because they are the subject of observation.

There are clear ethical implications of laboratory style experiments in educational settings, namely that the control group is deprived of receiving the initiative and potentially placed at a disadvantage. Clearly ethical considerations are far more stringent now making the use of this classical laboratory approach more difficult. In order to evaluate retention programmes now and to avoid the ethical pitfalls, a number of alternative approaches have emerged. One approach in particular attempts to emulate the effect of experimentation by evaluating effects on users and non-users of programmes. The experiment group is populated not through selection, but rather on a voluntary basis.

⁵ The measure is irrelevant as long as the reason for using that measure is established and it is measured consistently within the context in which the research is taking place.

⁶ The idea stems from some original experimentation work at the General Electric plant in Chicago between 1924 and 1932.

This methodology, whilst circumventing the ethical challenges posed by experimentation, creates its own set of problems. These stem from the lack of control of membership of the experiment group, otherwise known as self-selection. Self selection is a widely recognised problem in retention programme evaluation and is a direct threat to internal validity. Stanley and Witten (1990) in an evaluation of a university experience course, whilst finding significant positive impacts on the retention of participants, acknowledge that this could be caused by a number of issues around both programme effects and student motivation. They failed to recognise that participants were likely to be female and students living on campus, two groups that traditionally have lower dropouts than their respective counterparts, males and student living at home. Likewise Keenan and Grabovitch (1995) reported relatively high retention rates for programme participants but noted the high proportion of females on the programme compared to the institution average.

A solution to the problem of self selection is to sample both users and non-users of programmes with similar background characteristics. This technique has been used by several authors in retention programme evaluations (Boudreau and Kromrey 1994; Glass and Garrett 1995; Starke and Harth 2001). The specific objective is to ensure that both experiment and control groups are similar, thus enabling the isolation of the programme effects. This approach is not without problems though. For example Wilson et al (1997) argued that users and non-users could differ in ways that could not be controlled, for example psychologically, or perhaps motivation levels. The issue has been acknowledged as problematic in evaluating retention programmes by several authors (Cox et al. 2005: 54; Drane et al. 2005:351; Fowler and Zimitat 2008; Jacobi 1991; Perrine and Spain 2008; Smith 2004: 284; Starke and Harth 2001:29), although some argued that institutions should accept this and provide orientation courses for such highly motivated students (Sidle and McReynolds 1999 : 296).

As indicated in the previous chapter on solutions, most programmes are provided as bolt-on activities outside of the core activity of teaching and it is likely that the students who really need such services are the least likely to seek them out (Baumgart and Johnstone 1977: 568). The predominance of solutions that are aimed at changing the students are part of the "student as problem" discourse, a discourse which still arguably dominates retention research. This pathological view of students as needing to adapt to the culture of the institution has as Jones and Thomas (2001: 2) suggested, led to a predominance of bolt-on solutions rather than structural change. Jacklin and Le Riche (2009) are more specific in explaining why the bolt-on solution is problematic. They argue that increasing diversity in the student population leads to an increase in support initiatives, and this in turn creates pressures on front line academics expected to implement said initiatives. For them the answer lies in the development of a supportive culture, and central to this is the curriculum and teaching as a key vehicle enabling this change.

Many of the retention programmes listed in the previous chapter require significant resource allocation, and as such the institution will presumably want to be assured of the potential return on such investments. Certainly in the current tight budgetary climates there is evidence of institutions taking a keener interest in programme evaluation (Jamelske 2008:374). A failure to provide affective evaluation, or indeed evaluation that indicates little or no impact can clearly be a threat to the longevity of such programmes. An apposite example is provided by Raab and Adam (2005) who recount the withdrawal of state funding for an academic testing and remedial programmes after evaluation found little impact on student performance or retention.

Using longitudinal data sets to evaluate retention

Self-selection is a well recognised problem within the evaluation of retention programmes, and indeed any type of programme evaluation. A potential approach that retains the robust characteristics of experimentation, but also deals with the problem of self selection is provided by longitudinal analysis. In order to evaluate interventions classic experimentation theory holds that there needs to be some longitudinal and consistent measure that can capture the effects of any changes (Ruspini 2002). So for a retention programme to be evaluated in this way requires performance to be measured before and after the programme, and preferably for several periods before and after. Patton et al (2006: 21) are critical in their analysis of retention suggesting that the majority of studies only measure impact at a specific point.

Several authors have attempted to include as part of evaluation, longitudinal data. Ryan and Glen (2002) for example claimed that an improvement in retention rates of 3-4 percentage points was as a result of the introduction of retention programmes. Unfortunately no continuous data is provided so it is difficult to assess this change without additional statistics for the periods both preceding and following the two years in question. The absence of more longitudinal data sets that indicate the potential sustainability of retention initiatives is evident in other projects. For instance Darlaston-Jones et al (2003) whilst providing evidence of the effectiveness of a programme at the course level, and indicating an improvement in department level retention the year the programme was introduced, did not provide subsequent statistics to indicate sustainability. Likewise Backhus (1989) who assessed the impact of a university wide advising programme, found higher retention for the postprogramme cohort in 1984 compared to the pre-programme cohort in 1979. Periods prior to 1979, and 1980-1983 were excluded thus it is difficult to ascertain whether the retention in 1979 and 1984 were part of a trend or simply occurred by chance. One would assume that in this case the data would have been available for the missing years, so it is difficult to understand why it was not used. A similar charge could be levelled at Glynn et al (2003: 61) who claimed that the introduction of an early intervention policy was responsible for an increase in retention from 74.6% in 1993 to 80.9% in 1994. Whilst providing evidence that the retention rate was sustained through 2000 they only suggest that progression rates leading up to 1994 were on average 75% without actually providing the data. Furthermore given the difficulty of associating retention activity at the operational level with changes in retention at the level of the institution, the association claimed may have been caused by any number of changes in 1994.

At systemic levels there is a substantial amount of longitudinal retention data, and whilst data at this level is particularly useful for policy level decision making (Sanders and Burton 1996), it is less useful in addressing and evaluating retention programmes at more micro-levels. Despite this Villela (1986:223) specifically argued that retention performance needs to be captured at more micro levels and additionally the data collection needs to be consistent over a period of time. Often systemic level data is readily available in publicly available formats, but there is little in the way of micro level longitudinal data. This absence might be explained by any number of

reasons, but a key issue is related to the situation of the retention researcher. In situations where primary data is being collected then this implies long term contact with the phenomenon. Often those who are researching retention have short contact periods with the context; that is they dip in and out of retention research, often dipping in only once. This mitigates against longer term engagement and clearly is not conducive to longitudinal investigations of the problem, including assessing the impact and long term viability of retention initiatives (McInnis 2001).

Implementation problems

The previous chapter identified two general types of retention solution, those that are 'bolt-on' services such as peer mentoring, and skills support and those that are intended to be part of institutional structural and cultural change based largely around the student experience and teaching. Additional process essentials were identified and included activities such as retention data use and early warning and intervention. Despite the general consensus about the effect of these solutions, retention performance remains obstinately resistant to their use. One explanation for this is the way in which retention programmes are implemented and managed (Braxton et al. 2007; Tinto 2006).

The problem with the bolt-on solution is persuading students that are at risk to make use of such programmes and services. Within the US there is an extensive history of such programmes and it seems that a culture of acceptance, if not expectation by students has developed. Subsequently a very proactive approach is taken to encourage students to seek support, one referred to as 'intrusive' and in some cases attendance is obligatory. It is not unheard of for students to be expected to enter into a contractual agreement to attend (Colton et al. 1999). This pro-active approach has developed because as Levin & Levin (1991) suggest generally students often fail to recognise that they have a problem. Even if students do recognise they have a problem they either avoid seeking out help or are unaware of what hlp is available. It is a long standing problem as evidenced by Chickering and Hannah (1969) who found that where students had problems and also considered leaving, very few made use of dedicated counsellors, preferring instead to draw on the support of friends and family. Similarly in the UK Bentley and Allen (2006) found that a disappointingly small number of leavers that they surveyed made use of any of the available support services, and that the main reason for not doing so was lack of confidence. In fact the suggestion is that students who are having problems will actively avoid contact with the institution and the only contact they do have will be to inform them of the decision to leave⁷. In NA the proactive policy may to some extent reduce the incidence of low take-up of support services, but in the UK where most shy away from overtly targeting at risk students, support may not be reaching the students most in need.

Closely linked with identifying students in need are the support processes of early warning and intervention. It was suggested in the previous chapter that the use of student performance as an intervention tool is problematic because most first assessments occur at the earliest toward the end of the first term. This is simply too late, and is exacerbated by the student avoidance behaviour often exhibited by the very students who are experiencing problems. An alternative to early targeting and use of academic performance was to utilise class attendance as an indicator. Despite its clear benefits as an early warning system, attendance monitoring has an unclear and problematic usage history in HE. An effective attendance system, as well as requiring a clear policy, also needs a transparent supporting process that sets out who is responsible for action within the process, and who is held accountable. Whilst HE institutions tend to be good on policy, problems tend to surface as that policy filters down to the coal-face.

Structural and cultural barriers to implementation

Whilst the planning, implementation management and sustainability of the "bolt-on" programmes can be initiated largely outside of the faculty operations, the integrated approaches require that faculty is heavily involved. This means academics, support staff and management working together to implement and sustain institutional change, the simple message that all faculty members have an impact. Unfortunately this requires effective management, clear accountability and increased emphasis on those activities that have been shown to contribute to student retention, i.e. contact with faculty and effective teaching. It requires changes in the way things are done, in particular how teaching is delivered, and critically implies changes in culture and behaviour.

⁷ Most exit surveys record around 40-50% of students who leave as not providing any reason. It is likely that the student has not made any effort to contact the institution.

The culture in most HE institutions is in opposition to many of the managerial ideas currently seeping into the industry from the commercial world. Terms such as quality of service, and the movement toward student-as-client are just examples of this shift. Attitudes of academics in particular to retention have been exposed by several authors. Taylor and Bedford (2004) for example found that staff associated retention problems with aspects of the student, for example, motivation, academic ability and preparedness. In Finland, Lahteenoja and Pirttila-Backman (2005) looked at the attitudes of staff to student integration in the light of a changing student population. They found a wide spectrum of attitudes from acceptance of the changing environment and a need to integrate students, to the more prevalent complaints about types of students, and the need for them to be independent learners. Young et al (2007) compared the perceptions of academics and students in terms of causes of dropout. Not surprisingly academics blame students and the students blame the institution.

What most of these authors reveal is a general lack of appetite on the part of academics for engaging with the retention problem. Johnston and Simpson (2006: 30) suggest that even in recruiting institutions where retention is high priority, academics attempt to retain the same outlook and approach as their colleagues in selecting universities, and Yorke et al (1997: 46) point to the 'reluctance' of tutors to get involved with students on a personal level. Taylor and Bedford (2004: 391) argue that it is the natural structure and culture of institutions, often in the form of reward and promotion systems that block the retention efforts of even committed academics. It was a point emphasised by Tinto (2009) in an e-mail response to a question posed by myself asking why he thought that there had been so little progress on improving retention. He wrote:

But knowing what to do and finding the will to do what we know is not one and the same. For a variety of reasons institutions find implementation extremely difficulty if only because of the multiple interests that drive academic and staff behaviour. Academic unions sometimes intensify the problem.

The research indicates that there are significant cultural barriers potentially standing in the way of institutional adaption and change, but there are also structural problems. At an operational level HE institutions tend to be lacking in what are increasingly seen as essential capabilities, such as effective process management, and systems of accountability. Additionally there is little measurement of the performance of non-academic processes, and many of the processes that support student retention are not directly related to the core academic activities of an institution. This problem is particularly well articulated by Jamelske (2008:378) who suggests that the first year experience courses delivered at a public University in the US lacked uniformity because of lack of standard rules and procedures, lack of accountability, and lack of training for academics. The implementation problem is succinctly summarised by Tinto (1982):

However constructed or designed, no programme to reduce attrition is better than its implementation and management within the institution. It is one thing to conceive of, even design, an institutional retention effort; it is another to implement and manage one within the often rigid maze of institutional structures. (Tinto 1982 p: 699)

4.3 Summary

Retention is acknowledged to be a highly complex issue. This complexity extends across the whole retention spectrum, from the definition of retention, through the complexity of student leaving behaviour, and to the design and implementation of solutions. Add to this the lack of accurate and reliable programme evaluation and we indeed have what Braxton (2000) referred to as a the retention puzzle. It is this complexity that drives ever more diverse methodologies, and encourages the development of ever more complex models that are tested using sophisticated statistical techniques, and ever larger data sets. Whilst providing a fertile ground for academic research it is often associated with reliability issues, and additionally has the effect of moving concern further away from the central objective of improving student retention. Solution research also has its problems based largely in the difficulties of establishing effective evaluation of programmes, and in the implementation and sustainability of said programmes.

Tinto (1982: 695) drew attention to the fact that in the light of past failures it is unlikely that national retention rates could be affected, without some "very massive and far reaching changes in the education system....". Even institutional retention

rates he suggests are difficult to impact, but there is a glimmer of hope. Tinto makes it clear that there may be opportunities to target retention efforts at specific subpopulations, and whilst referring to disadvantaged groups, the concept could equally apply to specific courses.

For those who work at the sharp end with students, that is academics, and particularly for those academics responsible for student welfare such as course tutors and year tutors, the retention experience is an everyday one. These agents within the institution are the people that have a unique view of retention, they bear witness to the processes that students go through and have a unique view of retention in its entirety. McKeown et al (1993: 75) et al pondered the problem suggesting that research on retention had suffered from an imposition of assumptions about students and despite the familiarity of researchers with academia, there was little evidence of research that was grounded in the "realities of student life". Similarly Kantanis (2000) reflected that whilst institutions recognised the need for solutions and have committed resources to establishing them, the impact on students had been minimal. This he argues is largely because the programmes were too far removed from the key point of everyday contact; academics, and Glynn (1967) was specific about the need for front-line academics to take a leading role in addressing the problem:

He is the person in regular reach of his students and it should be part of his concern for them that he notes and investigates their dissatisfactions or difficulties as they arise. He is in a position to discover far more than any statistical enquiry based on questionnaires. (p 149)

In summary it would seem that what may be required are more long term practitioner based inquiries. Research by those engaged in actually dealing with students on a day to day basis may fill some of the gaps, and go some way toward addressing the inherent problems in existing research on both aspects of retention. The following chapter presents the methodology used to investigate retention and is intended to directly address some of the serious problems outlined in this chapter.

5.0 METHODOLOGY

The previous chapter presented some of the serious methodological problems of existing research on retention. The reliance on objective and quantitative dropout research, and the problems involved in effectively evaluating retention programmes have called into question the value and reliability of many findings. A central problem is that the vast majority of those who have carried out retention research are generally far removed from the issue they are investigating. In the context of these shortcomings the next section establishes the rationale for the methodology used to investigate retention in this thesis. After briefly establishing the nature and purposes of social science research, and in particular HE research, the focus turns to the issue of practitioner research and this idea is then expanded upon by developing a conceptual framework that encapsulates the approach taken to addressing the two key objectives in this thesis of identifying why students fail to progress and then identifying and implementing solutions.

5.1 Research in Social Science, Higher Education and retention.

Academic research is distinguished from other forms of inquiry by its systematic structure (Mertens 2005), and the requirement for peer reviewing and publication (Swann and Pratt 2003). Academics carry out research in many different areas, broadly classed into natural sciences and social sciences. Whilst many subjects have a long history of research with well established methodologies and methods, and a wealth of grounded knowledge, research into HE is not so well endowed. In the UK particularly despite an increase in publication rates over the past decade, it is still seen in the words of Tight (2003:3) as "relatively disorganised and little understood or appreciated". A similar situation exists in Australia where McInnis (2001) specifically blamed a lack of interest and funding for the dearth of research on HE. It is subsequently unsurprising that retention research in the UK and Australia draws heavily on the US body of work, despite some differences in structures and cultures.

Within social science research, and HE, methodologies have traditionally revolved around two paradigms, namely positivism and interpretivism, more commonly referred to as quantitative and qualitative. Quantitative research is underpinned by an ontology that views social constructs in the same way that natural science views natural phenomenon. This objective stance utilises methodologies that enable the collection of voluminous amounts of data which is then analysed using deductive methods. In this way hypotheses can be tested and theories assessed and indeed developed.

Historically quantitative research has dominated social science research, and this is particularly the case in HE (Tight.M 2004:12). This dominance according to Checkland and Howell (1998) derives from three concepts, namely reductionism, repeatability and refutation, and Cuff et al (1992:5) suggest that the ability to replicate work is particularly useful because "its results can be empirically warranted and verified by others in the field.". Carr and Kemmis (1986) noted that quantitative researchers claim that only empirical scientific data could effectively serve the need of policy and decision makers, especially in the public arena were decisions are held up to public scrutiny (increasingly the case in HE). Glaser and Strauss (1967) provide an astute observation on the reasons for the domination of quantitative research stating:

Thus advances in quantitative methods initiated the zeal to test unconfirmed theories with the 'facts'. Qualitative research, because of its poor showing in producing the scientifically reproducible fact, and its sensitivity in picking up everyday facts about social structures and social systems, was relegated,....to preliminary, exploratory, groundbreaking work for getting surveys started.(p 15)

Much of the early engagement in retention research came from senior administrators and other student related staff because these people were directly involved in institution management and indirectly, student performance (Astin et al. 1987). As academics became more involved and the research increased in both volume and diversity, a wider variety of subject disciplines became engaged. The vast majority of academics who are and have been involved in the research of retention tend be forced to take an objective perspective and this has contributed to a significant bias toward quantitative research, a situation that has only recently begun to change. The complex nature of retention also provides particular methodological problems because it has forced researchers to attempt to understand this complexity through the development of ever more sophisticated models and theories.

Implicit here is the relegation of qualitative research to a supporting role, although proponents of qualitative research would argue against this. They claim that approaches used to study physical phenomena were inappropriate for the study of social contexts because we are dealing with people not objects. Thus the application of laws to social contexts as is the wont of quantitative researchers is problematic and potentially denudes action of meaning (Carr and Kemmis 1986). It is a sentiment reflected in one of Lincoln and Guba's (1985) seven critiques of positivism. It states that:

Positivism has produced research with human respondents that ignores their humanness, a fact that has not only ethical but also validity limitations.(p 27)

Qualitative approaches stem from an ontology that is dichotomous to that underpinning quantitative research. Their departure point is that because reality is constructed by the behaviour and attitudes of individuals, then in order to know this reality the researcher must get to the root of this constructed meaning. Robson (2002:27) suggests that the way in which data would be collected would include "methods such as interviews and observation which allow them to acquire multiple perspectives". On a technical level this implies that the researcher is close to the subject, sample sizes will be small and the approaches to analysis and dissemination of findings will be based on induction rather than deduction. Commonly theory is developed rather than tested.

The acknowledged complexity of retention has encouraged many researchers that alternative approaches to positivism are necessary, and periodically they have responded (Christie and Dinham 1991; Hermanowicz 2006; Lehmann 2007; Malleson 1967; Sarnoff and Raphael 1955; Shedvin 1985; Yoshino 1958) but these works represent a minute proportion of the significant volume of research worldwide on student retention. There have been some rare criticisms of the Tinto model which contributed to the positivist hegemony in retention research. For example McKeown

et al (1993), whilst pointing out previous criticisms of the sociological theories deployed by both Spady and Tinto, provided an interactionist perspective of retention. The phenomenon of student behaviour in university is highly complex and he argued:

> Understanding the actions of students and other players in the university should begin with an effort to grasp the meanings these elements have for them. Unless there is a grounding in that empirical world, all of the adding of variables, clarifying of operational definitions, and improving of statistical techniques are likely to be of limited value. (p 76)

For some the SIM model was simply an inadequate tool to explain this complex process and what was required was a more interpretevist perspective.

The quantitative versus qualitative debate has at times been so intense that it was referred to as "The Paradigm wars" (Gage 1989) and whilst various alternative perspectives have emerged, such as critical theory and realism, there remains a philosophical tension between the two extremes. Despite this tension more pragmatic perspectives have begun to emerge that acknowledge the strength of both approaches (Gage 1989; Howe 1988; Pring 2004; Robson.C. 2002; Swann and Pratt 2003; Tashakkori and Teddlie 1998). Mixed methodologies allow for the combination of both qualitative and quantitative methods through various forms of triangulation for example.

In the research of retention Brunsden et al (2000) make it clear that the focus needs to shift to a more "optimistic and pragmatic" approach encompassing for example ethnomethdologies. Similarly Cosgrove and Watters (2009) suggested that any approach to developing solutions needs to be based on research to take place in context, and additionally needs to combine both qualitative and quantitative data collection methods in order to overcome some of the problems associated with existing retention research. Certainly later and as more UK based research came on line the potential for more qualitative approaches emerged, in particular within the PCE sector generally. Examples exist within both the FE sector (Hodkinson and Bloomer 2001) and HE (Assiter and Gibbs 2007; Quinn et al. 2006). Despite this constructivist turn, positivism has remained dominant and this is perhaps in no small part due to the urgent need to inform practice and serve the needs of policy making (Pritchard and Trowler 2003).

5.2 Practitioner research

Qualitative research as suggested earlier implies a more subjective role for the researcher, and also exposes an additional discourse on the researcher identity. We are essentially referring to the possibilities offered by practitioners as researchers. Traditionally the link between theory and practice was based on professional researchers producing the theory, with practitioners then making use of that theory. Argyris et al (1985:5) were of the view that this structure, successful as it was in the natural sciences, had contributed to some of the failings in social science stating a belief that "this division of labour reinforces a pernicious separation of theory and practice". Cohen (2005: 51) is explicit and sets out four domains of contention between researchers and practitioners namely; distance from the object of study, ideological perspectives, purpose of the research and the political agenda. Whyte (1991) argued that even where there was a clear application potential for research, often there was a failure to complete the cycle and useful ideas generally failed to be implemented.

The explanations for the divorce between researchers and practitioners for Hargreaves (1996a) lay in the epistemological and political positions of both groups. Knowledge created by researchers was valued because it was written, codifiable, theoretical, and generalised. It resided in the academy and was the basis for academic success. Conversely he noted that practitioner knowledge was situational and person specific and valued only in the context in which it was created. It is these differences that have been seized upon by researchers who see practitioner research as not being sufficiently scientific. The response to these problems has been to try to bring practitioners and researchers closer together in an attempt to remove some of the barriers to the theory-practice relationship. For Hargreaves (1996b) more evaluative research could achieve this along the lines of the type of evaluative research carried out in medicine.

Whilst the theory-practice debate remains, there has emerged the concept of practitioner as researcher, but even this concept is open to criticism from the professional research community. The main charge is that practitioners researching in their own environment are exposed to the problem of subjectivity, and value laden research and are likely to have insufficient time to carry out both functions effectively. In response the qualitative researcher would argue that the supposed value-free objective perspective of the positivist is in fact inherently value laden due to the actual process of choices made by the researcher (Lincoln and Guba 1985). The assumption here is that the practitioner-researcher is a practitioner first, and therefore is not a trained researcher.

Despite the potential of the practitioner-researcher to circumvent some of the traditional theory-practice gaps, even its proponents acknowledge some inherent problems. For instance Clayton et al (2008) posited that as well as the time constraint of combining research and practice, many practitioners hold pre-conceived ideas as to what constitutes good research. In a similar way Cohen (2005) suggested that practitioners in community colleges who took academic qualifications rarely applied any of the skills learnt in their jobs.

Notwithstanding the actual and perceived problems surrounding practitioner research, there is a strong and continually growing belief of the benefits and advantages that such approaches can provide (Argyris et al. 1985; Dadds 1998; McNiff 1988; McNiff et al. 1996; Whyte 1991). To many the concept of practitioner as researcher is normal, and there is now a strong tradition of practitioner as researcher, what Carr and Kemmis (1986) specifically referred to as the 'teacher as researcher' movement. This movement emphasises the distinct advantages that being close to the phenomenon being researched can provide, and Robson (2002) articulates these as ease of access, improved methodology and the potential for implementation of solutions. Pritchard and Trowler (2003:xv) are clear on the potential benefits that accrue from practitioner based research, which they encapsulated in the term "close-upness". They argued that it provides answers to real everyday problems, and critically it increases the chances of implementation. Dadds (1998) as well as outlining the potential for practitioner research to go beyond simple analysis, also introduces a definition of practitioner research:

In its broadest sense, I take practitioner research to refer to forms of enquiry which people undertake on their own working contexts and, usually, on their own professional work, in whatever sphere they practice. The main purpose of the enquiry is to shed light on aspects of that work with a view to bringing about some benevolent change. (p 41)

Whilst the bulk of practitioner research in education naturally refers to the core activity of teaching, when it comes to student retention defining who a retention practitioner is becomes problematic. This perhaps goes someway to explaining the lack of what could be considered to be practitioner research in this area.

5.3 Research design: Establishing a research strategy

Clearly there is a wide variety of methodological approaches available to the researcher, although there are some dimensions that may suggest a specific approach. These include the perspective and beliefs of the researcher, the nature of the phenomenon being researched, the position of the researcher in relation to the phenomenon context, and the purpose of the research itself. The researcher will approach the research issue with a personal philosophy shaped by issues such as belief, education and personal disposition, and this may naturally incline them to one of the perspectives outlined above. This inclination may be strong, and because social phenomena often lend themselves to multiple analysis methods then the researcher will naturally follow their inclination.

Having said this, the type of problem being investigated may also influence the method chosen, for example Gray (2004) suggests four generic types of research. These are exploratory, descriptive, explanatory and interpretive, and each asks a different type of question. This suggests that differing methodological approaches may be particularly suitable to that type, for example interpretive studies by their very nature demand interpretive approaches based on qualitative data. Similarly Mertens (2005) identified two types of research: that which was intended to generate theory as opposed to that which was intended for evaluation. She goes on to emphasise evaluative research as being geared more to the production of knowledge that can more immediately inform policy and decision making.

The purpose of the research could have an impact on the methodology chosen. By purpose we mean a number of things, firstly it may relate to who the research is for. For example if the project is being instigated by an agency that is not doing the research themselves then clearly the methodology may be pre-determined, and the researcher will have been likely to have been selected. Purpose could also refer to the general nature of the objectives of the research.

The final possible influence on research methodology is the position of the researcher in relation to the problem. Robson (2002) provides a useful general categorisation here distinguishing between 'insiders' and 'outsiders' to represent how close the researcher is to the context. Insiders are researchers that have some form of existing relationship with the phenomenon context, for example they may work within the environment. This introduces the concept of practitioners as researchers with clear implications for methodology. Insider research also suggests 'real world' research, an area that Robson says is potentially highly complex compared to laboratory research. Whilst the implication is a move to a more open system it means research becomes inherently more complex and out of the traditional control of positivist based research.

The loose framework identified above: person, problem, purpose and position, may be a useful departure point from where a conceptual framework for a research strategy for this thesis might be formulated. My experience of working at the operational level in industry has given me a particular perspective on the nature of what seem to be rationally and mechanistically operating systems⁸. Given the analysis of perspectives provided previously then I would probably consider myself to be of a realist persuasion with a strong bent toward pragmatism, and as such can acknowledge the usefulness of both qualitative and quantitative approaches.

The problem as identified in the two key objectives is to investigate the nature of the retention problem and understand why some students do not progress to year two of the business programmes, and also to investigate, implement and evaluate potential solutions to this. The first objective implies investigative/explanatory research whilst the latter clearly implies evaluative type research. Taking a holistic view then we are

⁸ As an example we can take my first operations management job as a production supervisor running a Coca Cola production line. On a strategic level the system is managed using aggregations and abstractions, and performance is manifest in output per time period. At the operational level there are a myriad of mechanisms involving both systems and people that undergird this outwardly rational system.

looking at some form of combinatory approach that can encompass both of these approaches.

The final dimension of position is particularly important here because it is a reflection of the nature of the relationship between the researcher and the problem. I would be classed very much as an insider due to my close proximity and everyday engagement with the research context, and because student retention is covertly part of my job then I would also be classed as researching aspects of my own practice. Additionally there is the issue of extensive engagement with the phenomenon and this brings in elements of ethnography. Given the potential complexity in establishing a clear methodological approach it may be useful to use a more macro departure point and lay out an overriding research strategy. Having established that this is a practitioner perspective of retention, taking a holistic view of the issues as they are manifest on a specific course and over an extended period of time, then it seems prudent to use a research strategy that encapsulates these elements.

5.3.1 Case study strategy

The approach or strategy that perhaps most reflects these elements is that offered by case study. Note the use of the term strategy or approach here rather than perhaps methodology or method (although there may be arguments for classifying it as methodology). On this point Yin (1994) states that

...the case study as a research strategy comprises an all encompassing method-with the logic of design incorporating specific approaches to data collection and to data analysis. In this sense, the case study is not either a data collection tactic nor merely a design feature alone but a comprehensive research strategy. (p 13)

Most authors tend to avoid classifying case-study into particular methodologies or methods, largely because as Tight (2003:9) suggests many types of research can themselves be viewed in a sense as case-studies, or they display one or more characteristics of a case-study. Robson (2002) is specific about the nature of case studies, and he suggests six characteristics. These are its strategic nature; its concern with a variety of research; its investigation of the particular (although problems of generalisation are important); its empiricism; a focus on the phenomenon in context, and making use of mixed methods. On this last point of mixed methods Stake (1995:xii) suggests that there are a wide variety of approaches that can be used under the case-study umbrella.

It is perhaps in more general descriptions of what case-studies can do in terms of research that we can begin to understand its strategic nature. Stake (1995) proposes that:

Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances. (p xi)

The key here is the idea of including everything related to that case particular case, irrespective of the nature of the case, whether it be a person, an organisation or even a larger macro-system such as a Nation. Westbrook (1995) makes the point in the context of the organisation as the case:

A case study documents or records, in an appropriate degree of detail, the operational activity of a single organization. It has the merit of being integrated, involving all relevant variables, and clearly real world. (p 8)

The central issue to take from all of these understandings of case study is in its holistic nature, the study of a phenomenon but in a context, and perhaps most importantly the preservation of socially constructed entities.

The strategy in this thesis is certainly to study all of retention within the context of a full time degree programme. The case study approach would also be appropriate due to the nature of the questions being asked about retention. Yin (1994) suggests that case studies are useful where the type of research question is of the 'how' or 'why' variety. This immediately resonated with the key questions being addressed in this thesis, namely why do students fail to progress to year two, and how non-progression can be addressed. Platt (2007) argues that the method used to collect data within a case study strategy need not be limited to the acquisition of qualitative data. She goes on to suggest that stereotyping the case approach as a qualitative methodology has created paradigmatic barriers to the use of quantitative data:

..."there may be a wider range of possibilities than typologies of stereotypes imply. Several authors have pointed out that there is no evident reason why quantitative data should not be part of what makes
up the richly detailed configuration picture of the case(s), or why some aspects of the whole cases should not be quantified. (Platt 2007 p: 1)

A key element in the design of case studies is the definition of the case, or as it is more commonly known the unit of analysis. Miles and Huberman (1994) define this process as 'Bounding the territory', saying that a case could be anything from an individual person to a nation. Mortenson (2005: 33) suggests that one of the three key foundations for the measurement of retention is the definition of the cohort, or a clearly defined subgroup of students. It has already been established that the subjects of this study are the first year students engaged on business programmes for whom I was year tutor between the years 2002-2008. The following section presents the nature of the case and starts with a contextual description of UoH.

The University of Huddersfield

The University of Huddersfield is based in the North of England in West Yorkshire. Within close proximity are situated several other HE institutions that are considered to be 'competitors' in terms of the types of students recruited, that is along with Huddersfield fall into the 'New University' category. The institution performs well on dimensions such as widening participation and its ethnic make up reflects local demography. The structure of the institution is based on academic schools of which there are seven: Business, Applied Sciences, Human & Health Sciences, Music & Humanities, Computing & Maths, Art & Design and Education. These schools are further divided internally into departments, with the Business School housing five, Accountancy; Management; Law; Marketing, and Business Studies. Within each department there are multiple programmes normally built around a core programme and within the Business Studies department this core programme is the Business Studies degree.

Defining the subject group

The BA (Hons) Business Studies is made up of 5 core modules and 1 option. Each module is worth 20 credits and lasts for the entire academic year. There are five other named programmes that share the 5 core modules with BA (Hons) Business Studies, each having a unique option relevant to that programme. Finally there are five more programmes that have between 2-4 common modules with the BA Business degree, and a number of modules delivered by other schools and/or departments. All 11

programmes are based in, and administered by the Business School and are shown in table 6 along with the modules that are included as core for each programme. Programmes are classified into 3 types, A (BA Business Studies); B (programmes that have the same 5 core modules), and C (collaborative programmes), a nomenclature that is used later for analytical purposes. The year in which the programme was initiated is listed in brackets, those with no date having been established before the commencement of the study. Additionally the number of students enrolled in each programme between 2002 and 2008 is indicated on the bottom row.

Classification	Α	В	В	В	В	В	С	С	С	С	С
Programme Core modules	BA Business Studies	Business information Management	International Business	Business with Financial Services (2006)	Business and the Environment	Entrepreneurshi p and Business	Law and Business (2007)	Global Politics and Business (2008)	Psychology and Business (2005)	Business with Design (2006)	Business and Journalism (2007)
Markets and Govt	Core	Core	Core	Core	Core	Core	Core	Core	Core	Core	Core
Introduction to Business	Core	Core	Core	Core	Core	Core	Core	Core		Core	Core
Business Operations	Core	Core	Core	Core	Core	Core		Core	Core	Core	
Accounting for Managers	Core	Core	Core	Core	Core	Core					
Managing Information	Core	Core	Core	Core	Core	Core	Core			Core	Core
Students enrolled 2002-2008	412	84	98	26	6	43	18	3	42	10	11

 Table 6 Business programme list and core modules

To be considered as enrolled, a student needed a student number and needed to be confirmed that they are attending. Thus students who do not take up places can be discounted from the subject group. This provided a total of 753 confirmed enrolled students between 2002 and 2008, and it is this group who are considered to be the subject of this thesis. I was both the first year tutor for the whole group and also engaged in teaching the core subject of Business Operations.

5.3.2 Emerging methodology and action research

Whilst the overriding structure has already been presented as a case study, explaining the process that was actually involved in this research has provided an interesting challenge. Traditionally non-practitioner theses take a cross-sectional view of a phenomenon mainly because of lack of time resulting in the 'one-shot' cross-sectional type of approach. In this thesis my position in relation to the phenomenon, the extended contact time in the field, and the sequential nature of the research problem of identifying why students don't progress and then finding a solution, points to a research methodology based around action research.

Action research has its roots in the work of Kurt Lewin, in particular his original article that established some of the key founding principles of action research (Lewin 1946). Key ideas presented here relate to the need for information that could be used by practitioners, or what Lewin referred to as "research leading to social action" and he goes on to state that "Research that produces nothing but books will not suffice". Action research as a methodology has gained in popularity across a wide spectrum of Social Science disciplines since Lewin's introduction of the original concept. Certainly within education it has become very popular as a way for practitioners to address the core issue of teaching and curriculum design (McNiff 1988; McNiff et al. 1996; Whyte 1991; Zuber-Skeritt 1992), although there remains scant evidence of its use to address educational processes, and no evidence for its use in retention research.

This diverse history and development have made it somewhat difficult to establish a clear definition of action research (Reason and Bradbury 2001) and whilst most researchers avoid doing so we can nevertheless extract some key indicative characteristics. Argyris et al (1985: 8-9) identify five key themes suggesting that action research aims to change client systems for some benefit, it involves paradigm changes, has an identifiable cycle of activities, is democratic, and contributes to both basic knowledge and social action. Whilst later attempts at characterising action research, particularly by educationalists, would include reflexivity, and subject participation (McNiff et al. 1996), the common retained theme remains the idea of cycles of action. These cycles normally consist of carrying out some form of action on the observed phenomenon and evaluating the effects. Often though the cycle can stimulate not only action aimed at transforming the system, but also can lead to what Levin and Greenwood (2001:p105) described as "the construction of new meanings" and subsequent further investigation.

The longitudinal nature of this research, my position as practitioner, and the key objective of improving retention, suggests activities that would fit neatly into an

action research methodology. Over the 7 year period of the research, several cycles or stages occurred (referred to as episodes herein), and are described in the following section. Several methods were used to collect both quantitative and qualitative data but throughout there is a continuing narrative that essentially presents the reflective aspect of my experience over the period 2002-2008 as a year tutor and lecturer. This narrative contains personal observations and thoughts that present some of the less tangible and measurable aspects of the year tutor function as I have experienced it and is encapsulated in a number of ways including field notes, reports and other documentation. Also it is a binding narrative that ties together the diverse method vignettes that are used, so even though the methods used are distinct each method is complemented by this narrative. It not only contextualises the data collected but also provides a detailed rationale. To some extent this approach may mitigate against some of the charges against action research about its output much in line with Brooker and MacPherson(1999) who state

It is our contention that practitioner research becomes more useful when accounts of practice are enriched by insights about why the data were collected, how they were collected, what the data say about practice (in the context in which the research occurs) and how data might inform practice beyond the boundaries of that context. (p 209)

There is an additional and very important dimension suggested here related to the potential generalisation that can be made from practitioner, and by definition, case study type research. Erlandson et al (1993: 32-33) suggest that naturalistic types of research produce "thick" situational descriptions that may or may not provide resonance with other contexts, as opposed to quantitative approaches which look for specific transferability of specific variables. Accordingly within the naturalistic realm it is those observers of other contexts that determine the level of transferability.

Ethical issues

The nature of the relationship that I built up with all the subjects has already been alluded to, and the level of access I had raises issues of ethics. Because social science research generally involves the investigation of humans, consideration for the rights and privacy of those subjects is vital. For many researchers, especially those who are considered to be outsiders coming in to a real-world context, not only are there ethical considerations but also access issues. Strike (2006) outlines the key issues in education research in the context of a balancing act between the motivation to improve conditions and the protection of vulnerable subject populations. He also raises the issue of research by practitioners and of action research methodologies citing problems of partial consent. Also raised is the issue of emerging research where it is difficult to establish clarity of purpose at the outset, a problem also suffered by those undertaking ethnomethodological types of research such as anthropologists. Strike cites part of the American Educational Research Association (AERA) code to support the concept of practitioner research: (the preamble to part II code of ethics 1992)

> Standards intended to protect the rights of human subjects should not be interpreted to prohibit teacher research, action research and/or other forms of practitioner inquiry so long as: the data are those that could be derived from the normal teaching/learning processes; confidentiality is maintained; the safety and welfare of the participants are protected; informed consent is obtained when appropriate; and the use of information obtained is primarily intended for the benefit of those receiving instruction in that setting.

As a practitioner the data collected over the period of the study has been part of the normal process of discharging my duties as year tutor and to some extent the guidelines pointed out above would be appropriate. For the various quantitative data there is no issue with confidentiality or informed consent because of the very nature of such data. In the case of qualitative data where by definition samples are smaller and can refer to individual subjects then the three issues of confidentiality, safety and welfare and informed consent become much more important. Clearly this thesis provides a challenge in terms of the balance between maintaining a natural honesty and reality in terms of responses by students, and the requirements for anonymity of any cases that are profiled. The main objective was to retain the natural process and to avoid the problems outlined in chapter four with respect to student responses. As such there were no specific interviews but rather a combination of observations and notes on conversations with students. Where appropriate additional comments have been made with regard to specific data collection issues particularly when students where informed of the potential use of the data.

The following section presents a chronological analysis of the series of episodes that occurred during the seven years. As suggested the methodologies change and in some

cases emerge in response to observations. Also periods of action are interspersed throughout this period aimed at addressing problems that had been identified. Within each episode there is a story of the research process including ethical issues.

5.3.3 Episode 1: 2002-2003

Upon becoming the year one tutor for the business programmes in 2002 I set about identifying the key roles that the task required. From what documentation was available, and through conversing with existing and past year tutors, it seemed that the main task was to look after the academic and pastoral wellbeing of students. Of particular importance to me was the rate at which students did not progress into year 2 and why. From an operations management perspective, student retention was a key indicator of the effectiveness of how we carried out our central functions, and an indicator of the quality of the business programme offering. Also it was vital to establish a consistent longitudinal data system that would allow the evaluation of any changes that were made. Central to assessing our performance was the collection and collation of various data so as a first step I endeavoured to establish a data file. Information was sought on the performance of the business programmes in previous years, both in terms of student academic performance, and systemic performance. Additionally background data relating to students would also be required, and specifically student attendance data.

What became evident rather quickly was that such summary statistical data was not available in the format that was required at the department level. Some of the data was in the system but not extractable in an appropriate format. As a simple example it was not possible to obtain the cohort descriptive performance statistics for a particular module, nor was it possible to obtain vital information like retention and withdrawal statistics. The problem was the way in which the university student records system was set up and is probably typical of systems in the industry. These early problems are consistent with many of the problems identified with relation to HE information systems generally, because they are designed as record systems when used at an operational level not as management information systems (Buglear 2009). Any request for performance statistics generally had to be made through a formal process to central IT services. The first task then was to establish an effective data collection process and identify what type of variables needed to be part of this data set.

Setting up the data files

In order to establish a local data file that could support the operational activities identified above, it would need both the use of primary and secondary data. The secondary data required would come from two sources, the university records system and from department records. Some data was not available from existing university systems and would need to be collected directly as it occurred. Such data would include student attendance records and other data related to students such as reasons for leaving and so on. It was this primary data that received the initial focus (secondary data could accessed at a later date) and attendance was perceived to be the most important at the beginning of the 2002 academic year. In chapter 3 it was indicated how important attendance was in acting as an early warning system so it was vital to establish an attendance monitoring system from the start of the term. This method of combining primary and secondary data in a composite file mirrors the approach used by Glynn et al (2003) to build a predictive model of student retention, although the Glynn method included a significant proportion of questionnaire data. It also has strong resonance with the methodology employed by Sanders and Burton (1996) who drew on institutional data and combined it with locally generated survey data. What both of these studies reflect is the generally poorly structured, and often inadequate information systems in institutions.

Attendance and non-progression data

Attendance was not recorded officially in 2002. Although individual tutors had their own systems it was not a wide practice. The intention was to collect detailed attendance on every student for each of the five core modules on the business programmes, but in order to do this it required that each tutor involved would need to take and feedback attendance each week. Furthermore it was decided only to collect attendance in the tutorials because of the logistical problems of attendance monitoring in large lectures. There were 11 different tutors involved in the teaching of the five core modules in 2002, and persuading them to take attendance proved to be a challenge.

Coming from an operations management background I deemed it vital that there was some form of process guide that could explain and support the attendance monitoring process, but before such a guide was distributed I spoke with each of the 11 tutors to discuss the intended plan. In this discussion I outlined the importance of attendance monitoring both as an early warning system, but also as a way of improving attendance and student performance. At the same time I offered an incentive in the form of relieving the tutors of the task of reporting non-attendance⁹. In exchange I asked tutors to take attendance registers at every tutorial and then feed the attendance records back to me so that I could then enter the data into the file.

The guide provided to tutors can be found in appendix I, and although the process implies electronic management of the system, some tutors preferred a hardcopy that they could fill in and photocopy and send to me each week. There was a stated attendance policy established in 2004 that required students be reported if they missed two consecutive sessions in a module. Theoretically module tutors were required to take attendance and report problems to year tutors/course leaders who would then take action. Again the use of this system is inconsistent but due to the absence of a system of management and control to ensure usage, it remains doubtful as to its impact and effectiveness. Additionally there is no evaluation of the use of the attendance monitoring system.

Some students will not progress into year two, and the reasons for this have been investigated in the literature review. Some students fill in exit forms, but many do not and indeed, as has been outlined in chapter 4, there are real problems with the reliability of retention data generally, both from surveys and exit forms. With an effective attendance monitoring system in place that enabled early intervention, it would be possible to produce a detailed record of contacts with students who were having difficulties and missing class. For every student an event profile was created that consisted of recording each contact event with the student, the method of contact, the content of that particular event, and the date. Furthermore each contact event was classified into one of two overarching categories. Category one is "one-way", this is

⁹ Whilst attendance monitoring was not required, unofficially there was an acceptance that notification of attendance problems was the responsibility of the tutor teaching the specific class. There was no official guide to the process, nor was anybody held accountable for attendance.

where some form of message was sent to the student normally requesting a response¹⁰. The second category is a two-way event where there was an exchange with the student, often triggered by an initial contact.

There were three types of resulting interaction, e-mail, telephone and face-to-face (F2F) contact. It must be stressed here that the contact process took place as part of the normal every day operations, and the F2F contact occurred in several settings. It may be a cursory discussion at the end of a seminar, or a chance meeting in a corridor, or sometimes a formal meeting where the student had been invited to attend. In each case a summary of the conversation or e-mail was entered into the student log. In a number of specific cases the students was asked if they would object if a summary of their case was used in my research project. The format that the data would appear in was explained and it was emphasised that no names would be used. Clearly for the majority of students there would be no entry in their log because they would not have missed sufficient classes to trigger an intervention contact. The resulting log entry was in the form of a chronological list of contact events, some one-way were it was recorded that a contact had been actioned, and others logging a two way conversation where the student had responded. This log or case history then provided the basis for a narrative to be constructed around the various contact events that had occurred. A final component that completed the picture were any field notes and observations that I had developed.

This primary data was collected throughout the academic year and provided the basis for the data file that would be used for the subsequent evaluation of retention. At the end of the academic year, secondary data in the form of student performance could also be added to the file. The resulting data file with the variables is presented in table 7. The categories for RESULT are intended to capture the often diverse nature of student paths through the first year and draws on categories used by various retention studies such as Hackman and Dysingers (1970) (persister; transfer; voluntary withdrawal and academic dismissal), Simpson et al (1980) (good standing

¹⁰ Depending on how early in the event profile the contact was the message could change. Normally it progressed from early expressions of concern and offers of support for the student and invitations to "discuss problems" to later requests for the student to contact us

withdrawals, failing withdrawals), and Wintre et al (2006) (transfers, probation, withdrawal). The description of each category is as follows

<u>Progress</u>: The student has achieved the necessary credits to progress onto the second year of the course.

<u>Fail:</u> The student completed all required assessments but failed to achieve the necessary credits to progress onto the second year of the course.

<u>Defer:</u> The student suspended their studies with the intention of returning the following year to start again.

<u>Withdraw:</u> The student officially signals their wish to withdraw from the course and it is officially actioned before the end of the academic year (before teaching week 24).

<u>Fail non-complete:</u> The student does not withdraw, does not sit all the required assessments and does not achieve the necessary credits to progress to the second year.

Variable name	Description
PROGRAMME	Specific course student enrolled on (see table 6)
PROGTYPE	Programme classified by type, A,B or C (see table 6)
STARTYEAR	Academic year in which student enrolled
MIATT*	Average student attendance in the Managing Information module
MIPERF1*	Student performance in assessment 1 of the Managing Information module
MIPERF2*	Student performance in assessment 2 of the Managing Information module
MIAVMAR*	Student total average mark for the Managing Information module
RESULT	Student result (Progress, fail, defer, withdraw, non-complete)
WITHDRAWTYPE	Classification of withdrawal (Early, circumstantial, late).
WKNUMWITH	Teaching week number student officially recorded as withdrawn (1-24)
NUMCONTACT	Number of contact attempts made with student
NUMDISCUSS	Number of interactions occurring with student
RESISTANT	Identifies if student was resistant to contact and support
* Four identical sets of	variables for each of the other 4 core modules.

Table 7. Primary data variables.

5.3.4 End of episode 1

2002 and 2003 had been largely spent establishing the data collection systems and generally observing the cohort. It had been a period of discovery as it were,

essentially about the nature of the task of year tutor, but also about some of the key issues related to student success. The key task had been to establish an attendance monitoring system that first year module tutors would buy into and at the same time to set up an effective intervention system that could capture the nature of student withdrawal and failure behaviour as it occurred. This had largely been achieved and the commencement of the 2004 academic year found us with an effective comprehensive attendance and early warning system.

Two years of data had now been accumulated and this along with my personal observations on student performance formed the basis of a report (Duty 2003). Over the recess period of 2004 I gave several presentations to both the Business School, and at University-wide retention seminars. At the Business School level this had the effect of raising an issue that had hitherto been little discussed. It is interesting to note the reactions of many of the academic staff to the figures for student dropout for 2002 and 2003. It would be true to say that in most cases staff were simply unaware of the scale of the problem, but even more concerning was the reaction. The prevailing view of many academic staff was that the problem lay with the nature of the students and there was a general feeling that students were lacking in some key skills and also that they were academically weaker than they were in the past.

The report contained some critical recommendations, for instance one tutor per module, and although not within the report I strongly urged that staff for teaching first year students be selected on a number of dimensions, namely teaching ability, commitment to student learning and that most critically they were 'student friendly'. By 2006 there was a stable and consistent first year team in place, with one tutor for four of the five core modules. Perhaps the most important result of raising the issue within the department was that the problem was now on the agenda and that a discourse was initiated. This discourse revolved around the academic performance of students and their attendance, and whilst some of the recommendations were gradually implemented the attention turned to the fundamental way in which students were taught.

5.3.5 Episode 2: 2004-2008

The 2004 academic year commenced with a set of recommendations in place, and two years of detailed retention data. The year was to witness activity in several areas including further data collection, and actions initiated to attempt to address some of the problems identified in 2002 and 2003.

A couple of issues had consistently appeared in the retention discourse and these were the level of preparation and thought that a student had gone through before coming to university, and whether students were first generation. Observations in 2002 and 2003 also indicated that students who obtained a place by methods other than the traditional UCAS procedure seemed to experience problems. In 2004 an additional primary data variable was established in order to try to capture the essence of preparation. It was called ENTMETHOD and identified the entry process that the student had gone through to obtain a place on the course. There were 4 categories established: normal UCAS entry; transfer-in; late application, and repeat students (repeating the year after failure in 2003). The second issue was related to a commonly cited characteristic of non-traditional students. This was whether the student had a parent that had attended university, and in order to collect such data students would need to be surveyed in induction. This variable labelled as FIRSTGEN was collected for the period 2005-2008.

Accessing secondary data

Despite the establishment of the attendance monitoring and student contact log, there still remained the problem of secondary data. As already stated the data was available in the system, but access was a challenge. This problem was solved when after delivering a presentation at an internal retention seminar, I was approached by a senior data manager for the university. Our subsequent discussion resulted in a long-term collaboration on the development of web-based retention reporting systems, but also it provided access to the secondary data I needed. I was able to obtain raw unfiltered data for all UG students who enrolled on the first year of a degree at Huddersfield for the period 2001-2004, and subsequently for each year after that so that I eventually had data for the period matching the thesis, 2002-2008. This

generated a total of 74,643 individual records covering every student who had enrolled on an undergraduate programme in the first year at any of the UoH sites. The data included the variables listed in table 8.

Variable name	Description
ACADYEAR	Academic year that student enrolled
SCHOOL	School student enrolled in
MONTHSTART	Identifies the month in which the course started.
COURSETITLE	Individual programme student enrolled on
TARIFFPOINTS	Entry points achieved by student
ENTRYQUAL	Specific entry qualification held by student
HOMEPOSTTCODE	Post code of student home address
LOCALPOSTCODE	Post code of student during term time
WITHDRAWREASN	Reason given by withdrawing student for leaving
WITHDRAWDTE	Date on which withdrawal registered on system
GENDER	Student gender
MODEOFATT	Attendance mode of student (Full-time, sandwich, part-time)
NATIONALITY	Student nationality
ETHNICITY	Student ethnic grouping (White, Asian, Black, Chinese)
AGE	Student age
COURSERESULT	End of year result for student (Pass, defer, withdraw, fail)
STUNUM	Student identification

Table 8. Background variables

There were now two distinct data files, one for UoH and one for the business programmes, and both were on excel spreadsheets. In order to complete the business programmes data file with the missing background data, it would be necessary to copy the background variables for the students on the business programmes from the UoH file into the business studies file. The UoH data file was a useful standalone source of information that could be used as a benchmark for the business data file, but some work was required on it to develop some additional derived variables, and before any copying to the business file. Initially 5 "derived" variables were identified and these are listed in table 9 along with an explanation of the derivation process.

Derived variable	Description
ACCOMMODATION	Type of accommodation. Derived by comparing HOMEPOSTCODE (H) with LOCALPOSTCODE (L). If H=L then student living at home. If L corresponds to halls of residence then student living in university accommodation. If L is not university accommodation and if H \Leftrightarrow L then student living in private rented accommodation.
FEEGROUP	The type of fee category, home, EU or overseas. Derived by categorising NATIONALITY.
STUDYCENTRE	Site of student attendance. (Huddersfield, Oldham, Barnsley, local, Overseas). Derived from COURSETITLE and cross referencing with LOCALPOSTCODE.
WKNUMWITHDRAW	Teaching week number student withdrew. Derived by referencing lookup tables to covert date into week number.
HUDSEPTFT	Identifies if a student is located at Huddersfield, is full-time and started their course in September. Uses STUDYCENTRE, MODEOFATT, and MONTHSTART. This would create a subset of the UoH file suitable for direct comparison with the business data file.

Table 9. Derived variables from the UoH data file

With the derived variables now created the necessary variables could be migrated from the UoH data file to the business data file. The variables that were copied are: ENTRYQUAL; WITHDRAWREASN, and ETHNICITY from the main file, and ACCOMMODATION and FEEGROUP from the derived variables. The resulting complete list of variables used in both files is indicated in appendix II. Both the UoH and business data files were entered into SPSS to facilitate subsequent analysis and in order to maintain security and anonymity all three identification variables, that is the two post code variables and the students' identification numbers were erased from the excel data files.

Programme and initiative evaluation

A comprehensive data set was now available that provided detailed accurate statistics on many aspects of the business cohorts. The next stage in the cycle, and driven by the second thesis objective, was to initiate programmes aimed at improving progression rates. Two types of retention improvement approach had been identified in the literature, bolt-on solutions and changes in institutional operations. Assessing a bolt-on programme came in the form of an experiment that made use of the academic skills support unit in the Business School. Institutional change was evaluated through the assessment of changing the teaching delivery system and structure away from lectures to seminars. The assessment approach taken here closely mirrors the three imperatives provided by Schuh (2005: 144-145), namely measuring effectiveness, accountability and improvement.

Evaluating academic skills support

As chapter 3 indicated there are a wide variety of retention programmes and support functions available for addressing student retention, but it has also been indicated how these "bolt-on" solutions are difficult to evaluate. Identifying which if any of the potential solutions to poor retention, such as counselling, peer mentoring, and so on might have had an impact on the retention of business students was problematic, one of the reasons being that the main service of counselling was administered centrally.

One service that was administered locally within the school was skills support and this enabled closer monitoring and provided more readily available data. The Academic Skills Support Unit was established for the Business School in 2002 and essentially went through all those stages common to such initiatives. They started with targeting, quickly discarded because of the implications of the deficit discourse, and then switched to publicising the existence of the unit as a resource for all students in the Business School as an aid to improving personal performance and providing help with specific academic skills.

Beginning in 2004 and lasting 4 years, an experiment was established in order to try to ascertain the impact that making use of academic skills might have on the performance and retention of the business students. In induction the students were made aware of the availability of academic skills and the types of specific services that they offered. Additionally, working with the Academic Skills Unit, a written assignment was set in the first week in the module (Business Operations) that I taught, and to be submitted by teaching week 6. Students were advised to visit the Academic Skills Unit in order to receive specific help related to this assignment. This help consisted of technical advice on structuring academic essays, plagiarism and referencing. Academic skills recorded which students made a visit related to this specific assignment but only released the list to myself after the assignments had been graded.

Also available were routinely collected data on all students that visited the Academic Skills Unit, and this included the number of visits, how long each visit lasted and the reason for the visit. Additionally more informal qualitative data were collected through discourse with various students who had made use of the service. The objective was to evaluate the impact of skills support directly on student performance, but also to assess its impact on systemic retention.

Changing the teaching delivery environment

The retention discourse that emerged was heavily driven by the findings from attendance monitoring. It indicated that low attendance was due to poor teaching and also because of inconvenient timetables. The report had the effect of invoking a discourse around student performance and learning and by the start of the 2004 academic year it had been decided to restructure the teaching delivery method. For the beginning of the 2004 academic year the five core modules had been converted from the classic lecture tutorial system to a system based on 2 hour seminars. Although the 2 hour seminar was a familiar format, it was only utilised where the class size was small, for example with option modules, and this was the first time all modules on a course had been converted to the seminar system.

Given that the implementation of seminars was aimed at addressing particular issues with regard to student success and retention, then it was vital that the impact could be effectively evaluated. The data collection system would subsequently provide the means by which this evaluation could take place, and additionally neatly sidesteps many of the problems identified in the previous chapter related to experimentation, particularly in terms of identifying causation. Longitudinal designs are effective at doing just this (Ruspini 2002:25; Yin 1994: 113-118) and it is this approach that was taken to evaluate the impact of changing to seminars.

The business data file contains consistent data that had been collected between 2002 and 2008. The seminar system was introduced in 2004, so in effect there was a ready made control group of students who had enrolled in 2002 and 2003 (208 students), and an experimental group that had enrolled between 2004 and 2008 (545 students). This would facilitate evaluation of the impact of introducing the seminar system in 2004.

Having observed students under both the lecture-tutorial system and the seminar system, and after many conversations with students in class, it was evident that there was strong support for the seminar system. I decided that in order to complement the statistical evidence that more qualitative evidence was needed, beyond the field notes and personal observations that I had made. The value of using mixed methods in order to contribute to reliability has already been outlined earlier in this chapter. The population chosen as the subjects were the current second year students on the business programmes (they will have experienced the seminar system in year one) because several of the second year modules were delivered using the lecture-tutorial system.

I wanted to collect as much data as possible but also needed it to be qualitative and so devised an open ended survey. Students were simply asked to write three things they liked and disliked about both the lecture-tutorial system they had experienced in their second year, and the seminar system. The short survey was dispensed in a class for a core module so that as many students as possible could be surveyed. Additionally the survey was carried out in two consecutive years, 2007 when 61% of the cohort was surveyed, and 2008 where 65% completed the survey. The high response rate was ensured because students filled the survey in immediately and I was able to collect the responses in class, and this approach also facilitated an explanation to the students as to the purpose of the research.

The explanation to the students included an option not to take part in the survey, an option that none of the students present took. The survey was anonymous with a minimum of background data being collected because the focus was on the experience of students. Additionally the survey was meant to be instrumental and used to complement the quantitative data. An assumption was made (based on informal conversation with students over 4 years) that the vast majority of students tended to have similar attitudes and experiences about the environment in which they were taught. Thus rather than focus on a small number of in-depth interviews, and in order to reflect the level of homogeneity of experience, the semi-structured design was used.

5.4 Summary

The methodology presented here is an action research one based on a case strategy, and the seven years of the study were characterised by two major cycles. The first cycle (2002-2003) was used to establish an attendance monitoring and early warning system, and to create an effective operational information system (business data file). It also served to highlight some of the issues relating to retention and this was summarised in a report presented to the department. The second cycle (2004-2008) is comprised of additions to the data collection, but more importantly witnessed the initiation of change in the teaching delivery system. Furthermore an experiment was initiated to evaluate the impact that skills support had on student performance and retention. The next chapter presents the results, mainly in the form of the seven years of accumulated data but specifically there are evaluations of both the change to seminars and the skills support experiment.

6.0 RESULTS

This chapter contains the results of various data collected over the seven year period of the project. There are three sections to the results, with the first providing demographic information describing the nature of the cohort and systemic retention data. The second section deals with the results of investigating student level retention behaviour. Drawing on qualitative and quantitative data it provides the basis for addressing the first thesis objective. The final section presents the results of evaluations of two types of retention solutions. A bolt-on solution in the form of academic skills is evaluated making use of quantitative data, and then an example of adapting the institution in the form of changes to the teaching delivery system is examined. The change in the teaching delivery system draws on both quantitative and qualitative data. Throughout there is a continuing narrative explaining the results reflecting the level of intimacy I had with the data over the seven year period.

6.1 Descriptive and systemic results

It is important to establish the nature of the student cohort for a number of reasons. Identifying the types of student that the Business programmes recruit and the types of programme they chose is key to the subsequent analysis on cohort performance and student dropout. Furthermore it is necessary to identify if there are any significant differences between the cohorts as this can have an impact on any longitudinal analysis and evaluation of retention initiatives and programmes.

		2002	2003	2004	2005	2006	2007	2008	Total
	Enrolled	98	110	95	114	109	106	121	753
	Male	59	73	56	74	53	61	70	446
DER	Male	60.2%	66.4%	58.9%	64.9%	48.6%	57.5%	57.9%	59.2%
GENDER	Female	39	37	39	40	56	45	51	307
Ŭ	remaie	39.8%	33.6%	41.1%	35.1%	51.4%	42.5%	42.1%	40.8%
	Mature entrant	14	21	15	18	29	24	33	154
AGE	Mature entrant	14.3%	19.1%	15.8%	15.8%	26.6%	22.6%	27.3%	20.5%
Ψ	Young entrant	84	89	80	96	80	82	82	593
		85.7%	80.9%	84.2%	84.2%	73.4%	77.4%	67.8%	78.8%
	Living at home University halls Private	50	63	43	63	60	62	56	397
ACCOMMODATION		51.0%	57.3%	45.3%	55.3%	55.0%	58.5%	46.3%	52.7%
ADDA		45	39	43	43	20	33	36	259
OMM		45.9%	35.5%	45.3%	37.7%	18.3%	31.1%	29.8%	34.4%
ACC		3	8	9	8	29	11	29	97
	accommodation	3.1%	7.3%	9.5%	7.0%	26.6%	10.4%	24.0%	12.9%
	White	69	78	61	85	75	74	85	527
	vv mte	70.4%	70.9%	64.2%	74.6%	68.8%	69.8%	70.2%	70.0%
	Asian	21	22	22	22	20	20	22	149
	Asian	21.4%	20.0%	23.2%	19.3%	18.3%	18.9%	18.2%	19.8%
Y		4	1	3	4	8	5	9	34
ETHNICITY	Black	4.1%	0.9%	3.2%	3.5%	7.3%	4.7%	7.4%	4.5%
INH		4	8	6	0	3	4	4	29
EJ	Chinese	4.1%	7.3%	6.3%	0.0%	2.8%	3.8%	3.3%	3.9%
		0	1	0	1	3	2	1	8
	Mixed	0.0%	0.9%	0.0%	0.9%	2.8%	1.9%	0.8%	1.1%
	0.5	0	0	3	2	0	1	0	6
	Other	0.0%	0.0%	3.2%	1.8%	0.0%	0.9%	0.0%	0.8%



Table 10 uses four categories to indicate the nature of the business cohorts between 2002 and 2008. The number of students enrolled varies little around an average of 107, and the cohort displays the types of characteristics associated with NT students. Key identifiers here are the proportion of students living at home with 52.7%¹¹ closely reflecting several findings (Bowl and Cooke 2008: 6; Jacoby and Garland 2004). Furthermore 30% of the cohort is non-white, and 20% Asian (reflecting the local demographic of West Yorkshire), thus reinforcing the NT flavour of the cohort. In 2006 and again in 2008, extensive recruitment in East Europe produced an influx of Polish students. Because this group is predominantly female, in the mature

¹¹ If East European students are excluded, most of who live in private accommodation, the figure is nearer 60%.

category and living in private accommodation, this has clearly had some impact on these three categories for 2006 and 2008.

	2002	2003	2004	2005	2006	2007	2008	Total
Enrolled	98	110	95	114	109	106	121	753
Home	93	97	80	101	71	89	91	622
nome	94.9%	88.2%	84.2%	88.6%	65.1%	84.0%	75.2%	82.6%
East EU	0	0	0	3	27	8	20	58
East EU	0.0%	0.0%	0.0%	2.6%	24.8%	7.5%	16.5%	7.7%
Overseas	5	12	13	7	9	6	8	60
Overseas	5.1%	10.9%	13.7%	6.1%	8.3%	5.7%	6.6%	8.0%
West EU	0	1	2	3	2	3	2	13
West EU	0.0%	0.9%	2.1%	2.6%	1.8%	2.8%	1.7%	1.7%

 Table 11 Enrolment by fee category

Table 11 indicates the impact that this particular recruitment strategy had on the enrolment proportions of different groups of students. The categories here are based on fee types, so we have home fee paying, overseas students and two groups of European Union students, East and West. The reason for the relatively low enrolment of the East EU group in 2007 is due to the absence of any recruitment activity in Poland for that academic year.

	2005	2006	2007	2008	Total
Enrolled	114	109	106	121	450
Parents did not attend	66	71	75	89	301
HE	57.9%	65.1%	70.8%	73.6%	66.9%
Parents attended HE	48	38	31	32	149
	42.1%	34.9%	29.2%	26.4%	33.1%

Table 12 Enrolment by whether first generation

A key variable often considered to define non-traditional is whether the student is the first generation to attend university. This data is not available from the university records system but was collected at induction and covered the 2005-2008 cohorts and is presented in table 12. It can be seen that there is a trend here with the proportion of first generation students increasing in each of the four years covered. It is possible that we are witnessing the local impact of the national policy on widening

	2002	2003	2004	2005	2006	2007	2008	Total
Enrolled	98	110	95	114	109	106	121	753
Business Studies	65	66	52	72	53	55	48	411
Dusilless Studies	66.3%	60.0%	54.7%	63.2%	48.6%	51.9%	39.7%	54.6%
5	33	42	37	33	37	34	40	256
5 core programme	33.7%	38.2%	38.9%	28.9%	33.9%	32.1%	33.1%	34.0%
Collaborative	0	2	6	9	19	17	33	86
programme	0.0%	1.8%	6.3%	7.9%	17.4%	16.0%	27.3%	11.4%

participation as UoH performs well in terms of providing access for students of nontraditional backgrounds.

Table 13 Enrolment by course type

Table 13 presents the data on the types of course that students enrol on. Up to 2005 the majority of students chose the standard Business Studies programme but gradually there has been a shift out of the standard programme and into collaborative programmes as these programmes came on line. Students taking the "5-common core" programmes have stayed relatively stable throughout. This trend reflects the general movement in the industry toward providing a wider choice of programmes for students. This dimension is important because it may act as a surrogate measure of student intention and motivation and provides an additional perspective from which to analyse student retention.

We know that some institutions can afford to select their students whilst many others are in the position of having to recruit. This phenomenon is also at work at the course level within any institution. The business programmes fall into the latter category where each year some students are recruited late and outside of the normal UCAS entry process. Additionally there are other entry routes that would not strictly be considered to be "normal" such as students that transfer in from other courses or other institutions and students who are repeating the year after failing to progress in the previous academic year.

	2004	2005	2006	2007	2008	Total
Enrolled	95	114	109	106	121	545
UCAS entry	74	101	97	88	107	467
	77.9%	88.6%	89.0%	83.0%	88.4%	85.7%
Transfer in	5	5	2	8	3	23
Transfer in	5.3%	4.4%	1.8%	7.5%	2.5%	4.2%
Denseting year	13	3	2	4	3	25
Repeating year	13.7%	2.6%	1.8%	3.8%	2.5%	4.6%
Late applicant	3	5	8	6	8	30
	3.2%	4.4%	7.3%	5.7%	6.6%	5.5%

Table 14 Enrolment by entry method

Table 14 provides data for the four entry categories identified for the five years this data were collected. Whilst some numbers may be small in any particular year as a total it provides significant numbers that can be used for subsequent retention analysis.

Systemic performance data

Students who can progress include all those who were eligible to go on to year two of their programme. Students who did not progress can further be divided into two categories: those who officially withdrew from the course before final assessment and those who did not withdraw. The withdrawal category includes students who transferred to other courses or other institutions and whilst traditionally not considered not to be a loss on a systemic level, have been included here because they represent a loss to the business programmes. Over the period 2002-2008 of the 89 students classified as voluntary withdrawals, 19 of them transferred to other courses or other institutions. 'Defer students' made the decision to suspend their studies for a year intending to start again the following year. Those students that did not withdraw can be distinguished by whether the student completed all required assessments, and those that did not. Logically then students that did complete all the assessments but still did not progress are categorised as true academic fails. Students who did not complete all assessments are classified as 'fail non-complete'.

	2002	2003	2004	2005	2006	2007	2008	Total
Enrolled	98	110	95	114	109	106	121	753
Drogross	74	74	73	93	88	87	89	578
Progress	75.5%	67.3%	76.8%	81.6%	80.7%	82.1%	73.6%	76.8%
Withdraw	9	14	16	15	10	12	13	89
withui aw	9.2%	12.7%	16.8%	13.2%	9.2%	11.3%	10.7%	11.8%
Defer	1	2	0	1	0	0	2	6
Delei	1.0%	1.8%	0.0%	0.9%	0.0%	0.0%	1.7%	0.8%
Fail	7	7	1	1	3	2	3	24
r an	7.1%	6.4%	1.1%	0.9%	2.8%	1.9%	2.5%	3.2%
Fail non-	7	13	5	4	8	5	14	56
complete	7.1%	11.8%	5.3%	3.5%	7.3%	4.7%	11.6%	7.4%

Table 15 Systemic retention performance

Table 15 provides an overall set of statistics indicating the results for all 753 students between 2002 and 2008. Of particular interest is the dramatic reduction in the number of students who fail academically from 2004, and coincides with the introduction of the seminar system. An explanation and analysis of this issue follows later in the chapter.

The literature review presented a significant volume of research that identified key indicators of the likelihood that students would or would not be successful. Much of this analysis uses sophisticated statistical techniques but the general consensus is that being female and displaying traditional characteristics would be predictive of success (Bayer 1968; Johnes 1990; Panos and Astin 1968) Table 16 presents five key characteristics commonly cited as having an impact on retention. From the data it is clear that being female, under 21 years of age, of white ethnicity, having high entry points and having one or more parents that attended university will all reduce the risk of failing to progress.

AGE GENDER	Male Female Total Mature entrant Young entrant Total	Progress 324 72.6% 254 82.7% 578 76.8% 103 66.9% 473	Withdraw 57 12.8% 32 10.4% 89 11.8% 29 18.8%	Defer 6 1.3% 0 0.0% 6 0.8%	Fail 17 3.8% 7 2.3% 24 3.2%	Fail NC 42 9.4% 14 4.6% 56	Total 446 59.2% 307 40.8% 753
	Female Total Mature entrant Young entrant	72.6% 254 82.7% 578 76.8% 103 66.9% 473	12.8% 32 10.4% 89 11.8% 29	0 0.0% 6 0.8%	3.8% 7 2.3% 24	14 4.6% 56	307 40.8%
	Total Mature entrant Young entrant	254 82.7% 578 76.8% 103 66.9% 473	32 10.4% 89 11.8% 29	0 0.0% 6 0.8%	7 2.3% 24	14 4.6% 56	307 40.8%
	Total Mature entrant Young entrant	82.7% 578 76.8% 103 66.9% 473	10.4% 89 11.8% 29	6 0.8%	24	4.6% 56	40.8%
	Mature entrant Young entrant	578 76.8% 103 66.9% 473	89 11.8% 29	6 0.8%	24	56	
AGE	Mature entrant Young entrant	76.8% 103 66.9% 473	11.8% 29	0.8%			
AGE	entrant Young entrant	103 66.9% 473	29		3.4%	7.4%	100%
AGE	entrant Young entrant	66.9% 473		3	3	16	154
AGE	entrant	473		1.9%	1.9%	10.4%	20.6%
AG	entrant		59	3	20	38	593
	Total	79.8%	9.9%	0.5%	3.4%	6.4%	79.4%
	Total	576	88	6	23	54	747
	Total	77.1%	11.8%	0.8%	3.1%	7.2%	100%
		426	48	4	15	28	521
	White	81.8%	9.2%	0.8%	2.9%	5.4%	69.2%
	A	95	21	1	5	20	142
	Asian Black	66.9%	14.8%	0.7%	3.5%	14.1%	18.9%
		21	7	0	2	3	33
		63.6%	21.2%	0.0%	6.1%	9.1%	4.4%
ΓΥ	Chinese	21	3	0	2	3	29
ICľ	Chinese	72.4%	10.3%	0.0%	6.9%	10.3%	3.9%
ETHNICITY	Mixed	5	2	0	0	1	8
ET	MIXCu	62.5%	25.0%	0.0%	0.0%	12.5%	1.1%
	Not Given	8	7	1	0	1	17
		47.1%	41.2%	5.9%	0.0%	5.9%	2.3%
	Other	2	1	0	0	0	3
	0.000	66.7%	33.3%	0.0%	0.0%	0.0%	0.4%
	Total	578	89	6	24	56	753
	Total	76.8%	11.8%	0.8%	3.2%	7.4%	100%
	Up to 160pts	97	15	0	9	17	138
	op to 100pto	70.3%	10.9%	0.0%	6.5%	12.3%	29.2%
\mathbf{TS}	161-260 pts	143	17	2	1	12	175
		81.7%	9.7%	1.1%	0.6%	6.9%	37.1%
ζ P(261-360 pts	107	7	1	1	1	117
LR)	-	91.5%	6.0% 2	0.9%	0.9%	0.9%	24.8%
ENTRY POINT	Over 360 points	40 95.2%	4.8%	0.0%	0.0%	0	42 8.9%
╞		387	4.8%	3	11	<u> </u>	472
	Total	82.0%	8.7%	0.6%	2.3%	6.4%	100%
		231	35	3	6	20	295
ION	1 st Generation	78.3%	11.9%	1.0%	2.0%	6.8%	67.4%
RAT.	Not 1 st	121	11.9%	0	1	11	143
INEI	Generation	84.6%	7.0%	0.0%	0.7%	7.7%	32.6%
1st GENERATION		352	45	3	7	31	438
1_{S}	Total	80.4%	10.3%	0.7%	1.6%	7.1%	100.0%

Table 16 Systemic retention by select categories

These findings confirm many years of large scale quantitative research on the impact of background and other factors on retention, in particular gender and entry qualifications. (Astin 1975; Astin 1972; McGrath and Braunstein 1997; Metzner and Bean 1987; Morgan et al. 2001; Ryland et al. 1994; Tharp 1998). Gender indicates that there are ten percentage points difference in favour of females but these figures may be skewed somewhat due to the large Asian male group (relatively low progression) and the high Eastern European female group (relatively high progression)¹². This is almost an identical difference found by Morgan et al (2001: 43) and seems to be a common occurance.

Of particular interest is the thirteen percentage points advantage that young entrants have over mature entrants lending strong support to the reports of high drop out rates for mature or older students (Johnson 1996: 80; McGivney 1996). Clearly mature students tend to have a different set of circumstances than their young counterparts, they tend to have additional domestic links and their university experience is altogether different. The simple two category division into young and mature, and the use of average age categories, whilst generally reflecting a negative correlation between age and progression, potentially misses some interesting phenomenon. If progression rates are cross referenced with age groupings of 5 year intervals then the relationship is not linear. This is not evidenced from the business studies data file because sample sizes are very small for intervals over 25, but it can be seen if the UoH data is used. Table 17 shows this data:

Age groups	Up to 21	21-25	26-30	31-35	36-40	41-45	46+
Progress %	76.1%	57.8%	64.4%	72.1%	72.9%	68.9%	64.5%
Sample	14,058	2,542	808	593	460	253	225

Table 17 Progression based on age intervals of 5 years.

The entry points of students seems to have a significant impact on retention supporting perhaps the most widely accepted theory that higher entry qualifications have a significant impact on how likely a student is to be retained. Perhaps the most concerning feature of this table is the significant disparity between white students and

 $^{^{12}}$ The progression rates for domestic white students only are male: 77.8% female 86.5% or a difference of 8.7%.

		Pass	Withdraw	Defer	Fail	Fail NC	Total
	Male	245	33	4	9	22	313
White	Iviale	78.3%	10.5%	1.3%	2.9%	7.0%	
Wł	Female	183	19	0	6	6	214
	remate	85.5%	8.9%	0.0%	2.8%	2.8%	
	Male	55	15	2	4	15	91
Asian	wrate	60.4%	16.5%	2.2%	4.4%	16.5%	
Asi	Female	43	8	0	1	6	58
	remaie	74.1%	13.8%	0.0%	1.7%	10.3%	
	Male	8	5	0	2	3	18
Black	Iviale	44.4%	27.8%	0.0%	11.1%	16.7%	
Bla	Famala	13	3	0	0	0	16
	Female	81.3%	18.8%	0.0%	0.0%	0.0%	
0	Male	11	3	0	2	1	17
Chinese	Iviale	64.7%	17.6%	0.0%	11.8%	5.9%	
Chi	Tomolo	10	0	0	0	2	12
Ŭ	Female	83.3%	0.0%	0.0%	0.0%	16.7%	
	Male	1	0	0	0	1	2
Mixed	Iviale	50.0%	0.0%	0.0%	0.0%	50.0%	
Mib	Female	4	2	0	0	0	6
	remaie	66.7%	33.3%	0.0%	0.0%	0.0%	
	Male	4	1	0	0	0	5
Other	Iviale	80.0%	20.0%	0.0%	0.0%	0.0%	
Otl	Fomolo	1	0	0	0	0	1
	Female	100.0%	0.0%	0.0%	0.0%	0.0%	
	Tatal	578	89	6	24	56	753
	Total	76.8%	11.8%	0.8%	3.2%	7.4%	100.0%

non-white students. Whilst ethnicity has long featured in US research, it remains an infrequent focus of retention research in the UK.

 Table 18 Retention by gender and ethnicity

The data in table 18 indicate that both gender and ethnicity has a strong impact on the chances of progressing to the second year. Further investigation of both dimensions reveals some additional information about how these two phenomena interact. What is evident is that the higher progression rates for females are duplicated across ethnic boundaries, and additionally the difference between females and males for Asian, black and Chinese students is more pronounced than for white students. The explanation for white male underachievement is well documented (Quinn et al. 2006) and relates to the underachievement of white working class males that exists at pre-university level. The same reasoning could probably be applied to black males, but the particularly poor retention of this group may be explained through additional

ethnically related issues such as peer pressure and social circumstances that are likely to be more acute for black students. As already stated UoH recruits a high proportion of Asian students and the performance of such students is of vital importance, so it is particularly concerning to note the relatively low progression rates for males and females. Whilst Asian males have comparable performance to both black and Chinese males, Asian females progress at a much lower rate than their white, black and Chinese counterparts.

The explanation for poor performance of Asian students is potentially complex and probably related to a combination of pre-university experience and achievement, and cultural issues. Asian males tend to be expected to attend university irrespective of personal wishes and Asian females often have to fight for the right to attend, frequently in the face of opposition from family. These data provide for the first time strong reliable empirical data for the nature of retention amongst ethnic minorities in the UK.

The second group of variables that may impact on retention are more related to structural and choice issues. In this group there are five variables, whether the student studied under the lecture or seminar system, the entry method, the type of accommodation, the fee type, and the programme chosen. As has been indicated earlier in the thesis, the type of accommodation students live in is often used as a key characteristic when defining non-traditional students.

	Pass	Withdraw	Defer	Fail	Fail NC	Total
Living at home	283	49	4	9	32	377
Living at home	75.1%	13.0%	1.1%	2.4%	8.5%	100.0%
University	179	24	0	9	13	225
accomodation	79.6%	10.7%	0.0%	4.0%	5.8%	100.0%
Private	14	1	1	1	3	20
dwelling	70.0%	5.0%	5.0%	5.0%	15.0%	100.0%
Total	476	74	5	19	48	622
	76.5%	11.9%	0.8%	3.1%	7.7%	100.0%

Table 19 Systemic retention of home students by accommodation type

Table 19 looks at performance of home students based on their accommodation type. Overseas and EU students have been omitted because they are most likely to live in private accommodation. It compares students who live in their family home with those who live in university accommodation and those who live in private rented accommodation. These results support the literature with students who are not living in their family home showing higher retention levels.

	Average entry points	Asian	White	Male	Female	First generation	Not first generation	Young	Mature
Living at home	232	89.9%	54.0%	60.9%	65.5%	69.1%	57.1%	58.8%	83.9%
University accommodation	238	10.1%	46.0%	39.1%	34.5%	30.9%	42.9%	41.2%	16.1%

Table 20 Accommodation type and background variables

One of the problems of this variable is identifying whether it is something specifically related to living at home that accounts for low retention or whether the students living at home display other characteristics that have an impact on retention. Table 20 provides an analysis of home based students in terms of type of accommodation. It can be seen that students that are Asian, Mature, or first generation are more likely to live at home. These background variables are also indicative of lower retention. Interestingly there is little significant difference in average entry points between the two groups.

During 2002 and 2003 it was observed that students who entered the university outside of the traditional UCAS process were less likely to progress. Between 2004 and 2008 the entry method of all students was recorded and the performance of each of the five groups is presented in table 21. Students who enter through the standard UCAS method or who transfer from other institutions are considerably more likely to be retained than students who enter through one of the other three methods, internal transfer, repeat or late application.

	Progress	Withdraw	Defer	Fail	Fail non- complete	Total
	388	43	2	9	25	467
UCAS entry	83.1%	9.2%	0.4%	1.9%	5.4%	83.8%
Transfer in from another	8	2	0	0	0	10
institution	80.0%	20.0%	0.0%	0.0%	0.0%	1.8%
Transfer in from another	8	2	0	0	3	13
course at UoH	61.5%	15.4%	0.0%	0.0%	23.1%	4.1%
Dencet	16	11	1	2	5	35
Repeat	45.7%	31.4%	2.9%	5.7%	14.3%	6.3%
Late	15	12	1	0	4	32
applicant	46.9%	37.5%	3.1%	0.0%	12.5%	5.7%
T-4-1	435	70	4	11	37	557
Total	78.1%	12.6%	0.7%	2.0%	6.6%	100.0%

Table 21 Systemic retention by entry type

The 23 students who transferred into the business programmes are distinguished by whether they transferred from other institutions (10 students) or from other courses within UoH (13 students). This provides further interesting reading because of the 10 students who transferred from other institutions 8 progressed (80%) whereas only 8 out of the 13 that transferred within UoH progressed (62%). Discussions indicated that transfers from other institutions all based their decision on a mixture of issues revolving around not settling in, dislike of previous institution and finance. Seven of the ten were local and moved back into the family home and one student although they lived locally went into university accommodation. Two students were Polish and had transferred because of the reputation the programme had for supporting EU, and particularly Polish students.

The discussions with students who had transferred from other courses within UoH revealed problems with their original choice. They generally found that the original course did not meet expectations in some way, for instance several students transferred from a course on computing and business complaining that there was little business content. Of the 13 internal transfers, 8 were in university accommodation

already, 3 living at home and two (Polish students) living in private accommodation. Both internal and external transfers-in had obtained places through the UCAS system, but for internal transfers in it seems that the course switch may be indicative of underlying doubt or indecision that leads to only a 61.5% chance of progression. Repeat students are the least likely to be retained with only a 45.7% chance of progressing, and students that apply late directly to the UoH are almost identical with a 46.9% chance of progressing.

	% Mature	Average age	% Residential	% A-Levels	Average entry points
UCAS	18.5%	19.7	32.7%	76.7%	245 (n=316)
Repeat	27.3%	20.1	20.0%	76.0%	181 (n=10)
Late entrants	67.7%	24.0	3.0%	40.6%	156 (n=17)

Table 22 Student profiles by entry method

Reference to table 22 indicates some significant differences in the profiles of students depending on entry method. Repeat students are broadly similar to UCAS entrants except that they tend to have lower entry points, are marginally more likely to live at home and are more likely to be in the mature category. Late entrants differ significantly from UCAS entrants on all 5 dimensions and these differences go someway in explaining the low progression of such students. Furthermore they provide empirical background evidence to support the findings of Bennet (2003) who identified that students who began the course late also tended to have poor study skills, be poorly motivated and feel isolated, and that this contributed to poor retention.

There is little research that investigates retention from this perspective although in the US an internal report for San Jacinto community college (2011) does indicate that students who enrol late are significantly less likely to progress. In the UK Longden (2006) found that lateness in application did not impact likelihood of retention, but It is not clear if the 5 students who applied after the start of term were UCAS applicants. Fitzgibbon and Prior (2006: 22) do identify that only 5 out of 17 (32%) late enrollers progressed on a Business course, significantly lower than the 46.9% identified in this thesis. The poor retention of late applicants in this thesis may be because such students are likely to display characteristics that define them as non-

traditional as indicated in table 21, and also it may indicate a lack of preparation and thought and subsequent lack of commitment.

There are other indirect references to the link between psychological preparedness and performance at university. Shedvin (1985: 166) found that a key determinant of voluntary withdrawal was a lack of clear objectives and that the decision to go to university was often driven by other agents such as parents or peers. Boudreau and Kromry (1994) in their evaluation of an experience course found that students who were classed as "alternative entry" (alternative entry was not clearly defined) had significantly lower retention rates than normal entrants for both participants and non participants in the experience course. The results here seem to support the findings of several UK based researchers who identified level of preparedness as a factor impacting on retention (Bennet. 2003; Lowe and Cook 2003; Ozga and Sukhnandan 1998).

These results also provide strong evidence that entry method has a significant impact on retention and this has implications in particular for university courses that need to recruit. These types of courses are normally found in new universities and thus late recruitment may be a significant contributory factor to poor retention. Furthermore this creates increased numbers of students who have to repeat, again contributing to poor retention rates in subsequent years. Reference to table 14 indicates this process with 13% of enrolees in 2004 being repeat students having failed to progress in 2003. Subsequent to this there is a significant drop in repeat student enrolees as a result of improving the learning environment by changing to the seminar system (explained later). Unless the retention cycle is broken by intervention programmes that work, the recruiting institution will be likely to continue to suffer from this type of repetitive failure to progress.

	Progress	Withdraw	Defer	Fail	Fail NC	Total
Home	340	52	3	6	31	432
nome	78.7%	12.0%	0.7%	1.4%	7.2%	
East EU	49	5	0	2	2	58
	84.6%	8.6%	0.0%	3.4%	3.4%	
Overseas	31	8	0	2	2	43
Overseas	72.1%	18.5%	0%	4.7%	4.7%	
West EU	10	1	0	0	1	12
West EU	83.4%	8.3%	0.0%	0.0%	8.3%	
T ()	430	66	3	10	36	545
Total						

Table 23 Systemic retention by fee type (2004-2008)

An analysis of the performance by fee group is provided in table 23. Four classifications of students were identified here, home students resident in the UK, Overseas students, and EU students split into those from eastern European countries and those from Western European countries. This table only covers the period 2004-2008 when the seminar system was in use when progression rates were better than 2002-2003. Because there were no east EU students in the 2002-2003 group this would cause an imbalance with the predominance of home students dragging the progression rates down for that group (inclusion of the 2002-2003 period reduces the progress percentage for home students to 76.5%)

Non-home students traditionally are at a disadvantage due to language barriers and whilst they will have passed the required English language level in order to study at UoH, most struggle early on. In a significant number of cases the student never reaches the required level despite focussed supplementary language courses. East European students (85% from Poland) have despite similar language problems to overseas students, performed very well. The bulk of these students were recruited in 2006 and 2008 mainly as a result of specifically targeting Poland. Having taught these students it is very interesting to compare their attitude, expectations and experience with home students. Of particular interest is the nature of the educational experience these students had in their native country, which tended to be stricter in terms of attendance and be based on a rote learning system. As one student pointed out:

"We had to go to class over 30 hours a week and we learned the text book off by heart. It is very different here, it is far more liberal but I don't think the lecturers are respected".

This statement is fairly representative of the views of East European students, and despite the clear conflict of learning cultures, the vast majority adjusted very quickly. It is interesting to note how the Polish students were often shocked by the behaviour of some home students and simply could not understand the lack of motivation frequently referring to them as lazy. When asked which system they preferred the unanimous response was in favour of the UK system. Despite the steep learning curve that language initially presented to these students, they adjusted remarkably quickly and gradually equalled the performance of home students in the qualitative modules. Another observation was that high level of technical ability of these students which enabled them to excel in modules such as Managing Information, Accounts for Managers and Markets and Government.

2002-2008	Pass	Withdraw	Defer	Fail	Fail NC	Total
Business Studies	302	71	3	15	20	411
Dusiness Studies	73.5%	17.3%	0.7%	3.6%	4.9%	54.6%
5	207	17	2	7	23	256
5-core degree	80.9%	6.6%	0.8%	2.7%	9.0%	34.0%
Collaborative	69	1	1	2	13	86
degree	80.2%	1.2%	1.2%	2.3%	15.1%	11.4%
Total	578	89	6	24	56	753
Total	76.8%	11.8%	0.8%	3.2%	7.4%	100%

2002-2007	Pass	Withdraw	Defer	Fail	Fail NC	Total
Business studies	271	59	2	14	17	363
Dusiness studies	74.7%	16.3%	0.6%	3.9%	4.7%	57.4%
5	170	16	2	7	21	216
5-core degree	78.7%	7.4%	0.9%	3.2%	9.7%	34.2%
Collaborative	48	1	0	0	4	53
degree	90.6%	1.9%	0.0%	0.0%	7.5%	8.4%
Total	489	76	4	21	42	632
	77.4%	12.0%	0.6%	3.3%	6.6%	100%

Table 24 Systemic retention by course type

An analysis of retention by course type can be seen in table 24. The courses are split into three generic types as described earlier in the methodology. The reason for presenting the lower table is to provide a more reliable indication of the impact of course choice on retention. As already indicated, 2008 was a particularly unusual year because of the low retention rates for collaborative degrees and the unusually high retention rates for 5-core programmes. Generally, students taking 5-core programmes are more likely to be retained than those taking BA Business Studies. Students taking the collaborative programmes are considerably more likely to be retained than both 5-core and BA Business Studies. To some extent this would seem to support the findings of Sauer and O'Donnel (2006) certainly in the case of collaborative courses most of which are a recent innovation (past 5 years). They do go on to suggest that it is more likely that the students who take new courses are different in some way from other students, for instance they could be more motivated.

	Average entry points	First generation	Not first generation	Male	Female	Mature	Young
Business Studies	233	56.9%	51.4%	60.7%	55.3%	55.6%	59.1%
5-core	234	25.9%	37.6%	32.6%	29.8%	40.4%	29.9%
Collaborative	230	17.2%	11.0%	6.7%	14.9%	4.0%	10.9%

Table 25 Programme choice by selected variables

Table 25 identifies which courses are chosen by particular types of student and this indicates that whilst young students and females are more likely to take collaborative programmes, there is little difference in the average entry points.

6.2 Student failure to progress: 2002-2008.

In the systemic performance section the question of how many leave was addressed. In this section the 'who', 'when', 'how' and 'why' of student FTP is analysed. Table 26 indicates that 174 of enrolled students failed to progress to year 2 over the seven years covered by the study. Each year the number of students that were FTP is presented along with a percentage figure representing the number of students as a proportion of those enrolled. It also gives a summary of how these students were distributed amongst the four main FTP categories of withdrawal, defer, fail and fail non-complete.

	2002	2003	2004	2005	2006	2007	2008	Total
Enrolled	98	110	95	114	109	106	121	753
DTD	24	36	22	21	21	19	31	174
FTP	24.5%	32.7%	23.2%	18.4%	19.3%	17.9%	25.6%	23.1%
W/th Jacon	9	15	16	16	12	12	13	93
Withdraw	37.5%	41.7%	72.7%	76.2%	57.1%	63.2%	41.9%	53.4%
Defer	1	2	0	1	0	0	2	6
Deler	4.2%	5.6%	0.0%	4.8%	0.0%	0.0%	6.5%	3.4%
Fail	7	7	1	1	3	2	3	24
raii	29.2%	19.4%	4.5%	4.8%	14.3%	10.5%	9.7%	13.8%
Fail NC	7	12	5	3	6	5	13	51
ran NC	29.2%	33.3%	22.7%	14.3%	28.6%	26.3%	41.9%	29.3%
Total	24	36	22	21	21	19	31	174

Table 26 Failure-to-progress categories

Each of these students has a personal story unique to themselves and for most of them this has been captured in the contact profile log described in the methodology section. For some students this log contains extensive information relating to contact episodes with myself or other members of the first year team and from this a narrative can be extracted. Despite the individual and qualitative nature of the narrative, and in order to present this data, some effort has been made to categorise the nature of FTP so that it can be presented in a more thematic format. Where appropriate, specific cases are rendered that exemplify particular themes that emerge.

Student resistant behaviour

Before discussing FTP in general it is important to outline some key findings in terms of the behaviour of students who are having problems. It became evident from an early point that students who were having problems, thinking of leaving or indeed had decided to leave, often avoided any contact with the institution. This corroborates findings of several researchers who have found this type of avoidance behaviour. Chickering and Hannah (1969) for example suggested that students turn to the university for support as a last resort, preferring to rely on family and peers. They go on to suggest that even if and when the university is contacted their decision will have already been made. Similarly Thomas et al (1996: 212) and Yorke et al (1997) both found that very few students who withdrew had made use of the various support services available such as counselling, careers advice or the student union. Jacklin and Le Riche (2009: 741) found that whilst students rated interpersonal contact (someone
to listen) as the most important element of support, tutors were rated third behind fellow students and family as who they would turn to.

This type of behaviour was observed in many of the business students and in order to identify how common it was students were recorded in the contact log as being either resistant or receptive to support offers and contact efforts. The decision to tag a student either way was based on a number of dimensions both quantitative and qualitative. On the qualitative side it was based on my experience and knowledge of the student through observation and discussion. The quantitative dimension was simply represented by the number of contact efforts that were ignored as recorded in the student contact log. I found that the resistant student would often ignore contact efforts, but when they were contacted they would provide various excuses for non-attendance that could actually change with time. In most cases the true reason that was at the root of the problem would eventually surface but only after careful and empathetic questioning and persistence in efforts to contact the student. Table 27 indicates the proportion of FTP students who were classified as resistant and not resistant.

	2002	2003	2004	2005	2006	2007	2008
% Resistant	43.8	40.7	42.9	15.8	27.8	23.5	27.9
% Receptive	56.2	59.3	57.1	84.2	72.2	76.5	72.1

Table 27 Students resistant to support

Further interrogation of the data indicated that 36% of males were resistant as opposed to 22% of females. Of students classed as young 28% were resistant whilst of their mature counterparts 43% were resistant. There was little difference between White students and Asian students with both groups showing around 27% being resistant, but 80% of black students tended to be resistant to offers of support.

Usually the early warning system was triggered as the student stopped attending class. This would invoke a first contact event normally a mail or attempt to contact the student by telephone. On first contacting the student surprise was often expressed that anyone was making the effort to engage with them, and additionally they would be surprised that we had a record of their attendance (although all students were

informed of the attendance monitoring in induction). Some would actually dispute the attendance record until it was actually presented to them. In most cases the student would start attending again and this would last for one or two weeks and the cycle of missing class would begin again. This would continue with various students to varying degrees, in many cases with students providing different reasons for missing class each time. In most cases the result was that the root problem was eventually revealed, some times quite early in the process but in some cases it could drag on until very near to the end of the academic year. This could result in students failing academically or in failing to complete all the required assessments.

Table 27 indicates a high level of resistance behaviour between 2002 and 2004 and it was considered to be a serious problem. In 2005 it was decided to integrate additional information into the induction talks given to new students. The content of this talk was rather unusual in that it opened a discourse about doubt and invited students to approach us if they had any doubts about whether they were on the right course, or indeed whether the choice of university was right for them at this time. Clearly it was not presented as starkly as this but rather in the context of presenting us as concerned about student welfare and was tied in with a general talk on the services that were available throughout the university. Also it was stressed that we were there to help students make the right decision, even if the right decision involved them transferring or leaving.

It is interesting to note that the incidence of resistance fell sharply in 2005 and rose again slightly in 2006 but was maintained thereafter at a relatively low level compared to the 2002-2004 period. This change was manifest at the student level and there was certainly a higher incidence of students prepared to come forward if they had problems, or indeed for any questions they had. There was also a noticeable reduction in student avoidance behaviour and whilst the induction talk may have had some impact, the general approachability and student centred culture that built up around the first year teaching team was a contributing factor. Many of the students who came to see me were actually referrals from other members of the first year team.

Student withdrawal before year end

The largest category is that of withdrawal with 93 students representing 53.4% of all students who did not progress. The proportion of students withdrawing was particularly high in 2004 and 2005 and this is probably due to the intense efforts that were made to intervene and identify students having problems earlier. This was facilitated somewhat by the fact that the attendance monitoring policy (described in the methodology) had been in place for three years and had essentially become embedded in operations.



Figure 5 Points of student withdrawal

Figure 5 indicates the point at which students withdrew and compares the business programmes with statistics from the UoH data file. The pattern of withdrawal timing for students on the business programmes is steadily downwards except for weeks 8-12 where there is a slight increase. If we look at the pattern for the University we can see that the majority of students who withdrew, did so in the last four weeks of each term, and this pattern is repeated when the information is disaggregated down to school and even course level. The university statistics would suggest then that most students who withdraw decide to do so in either weeks 9-12 or weeks 21-24. This pattern of withdrawal within the UoH mirrors the patterns identified by Prescott and Simpson (2004: 250) who additionally identify the first few weeks as being critical.

One explanation of this difference is in the nature of the process of identifying and intervening and then officially withdrawing students. This process involves a number of stages starting with the identification of students who are having problems or who want to withdraw. In the case of students who want to withdraw, for example to switch courses, then normally the student will probably come forward. When a student is identified as withdrawing, administration is then informed and the student record is changed to reflect their withdrawn status. Whilst sounding simple enough the process is rarely this straight forward, and more often than not involves a significant amount of time and effort to get to the point where administration can be informed. In this case it is left to the institution through the actions of front-line academics to identify students having difficulties and this may be where the first problem in the process occurs. Early intervention and attendance monitoring has already been identified as a central process tool supporting retention. In the methodology section it was made clear that the early engagement with the problem of retention was facilitated through front line contact with students and the use of attendance monitoring as a tool for identifying students with problems. Because of my policy to engage with students early and monitor attendance from week one it was possible to intervene quickly and this to some extent may explain the more consistent trend for the business programmes.

There is another dimension though that may contribute to the difference and this is related to when the student is officially withdrawn. I worked very closely with administration to ensure students were withdrawn in the week in which it was confirmed that they had actually withdrawn. The pattern of spikes in the university data mirrors the pattern identified by McGivney (1996: 117) and may suggest that perhaps despite being identified early, students were officially withdrawn in batches, particularly in weeks 9-12 and 21-24. The spike in weeks 9-12 coincides with the annual requirement to return student enrolment data to HESA and reflects the rush to get students off the system before December so that they do not appear in retention statistics. The jump in withdrawals in weeks 21-24 is likely to be more related to clearing up the system before the end of the academic year. It suggests that the business withdrawal trend is a more accurate reflection of when students are actually leaving and possibly reflects the early intervention policy. Early intervention serves an additional vital purpose in terms of student support because it potentially facilitates

	2002	2003	2004	2005	2006	2007	2008	Total
Early leaves	1	6	8	8	5	8	4	40
Early leaver	11.1%	40.0%	50.0%	50.0%	41.7%	66.7%	30.8%	43.0%
Circumstantial	6	4	2	4	2	1	3	22
leaver	66.7%	26.7%	12.5%	25.0%	16.7%	8.3%	23.1%	23.7%
L ata laavan	2	5	6	4	5	3	6	31
Late leaver	22.2%	33.3%	37.5%	25.0%	41.7%	25.0%	46.2%	33.3%
Total	9	15	16	16	12	12	13	93

student decision making and can help them at what is a critical period to make the right decision.

Table 28 Types of withdrawal by timing

Despite the complexity of individual withdrawal three generic types were identified based essentially on timing. Table 28 shows these three categories and the number and proportion of withdrawing students falling into each category. The average week number that students withdrew in each category was 4.5, 11.1 and 14.6 for early leavers, circumstantial leavers and late leavers respectively. The increase in the proportion of late leavers in 2008 is tied in closely with problems outlined in the system performance analysis related to lack of contact with students on collaborative degrees. This table provides for the first time a detailed breakdown of voluntary withdrawals.

Early leavers

Early leavers are classified as students who withdraw generally within the first six weeks of the first term (the average was 4.5 weeks into the course), although it may include students who leave later on because of indecision for example. The 2002 figure is low because this was the first year as year tutor and I hadn't established the importance of early intervention and support. Thus it can be seen that the circumstantial proportion is very high as students were gradually identified through the year and generally gave circumstantial reasons for leaving. Students who left early could be further split into two main categories, students who transferred to another course or institution, and students who decided to leave HE altogether for various reasons.

This category of withdrawal reflects one of Shedvin's (1985) withdrawal categories called "commitment to a prior goal", which is largely explained as being enrolled on the wrong course for various reasons. Of the 40 early leavers in this thesis 19 were transfers, mostly to other courses within Huddersfield. Generally these students found themselves on the wrong course either because they felt they had been given the wrong information or because the course was not as they expected. As a group there was very little engagement with these students beyond the first meeting, but the approach was always to support the student in their decision and help them feel positive about it.

The other 21 early leavers generally provide complex variations on a theme based around not settling, feeling out of place or alienated in the university culture. Additionally some students had made the wrong decision in coming to university. An example of not settling is provided by student 156 and strongly corroborates the findings of Zepke et al (2006). This student displayed all the characteristics of a NT student and what is particularly illustrated here is the complexity of circumstances that can conspire to initiate the disengagement process.

I.D	156	Number of contacts	1
Gender	Female	Number of discourses (F2F)	1 (1)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Early Leaver
Accommodation	Home	Result	Withdrawn
First generation	Yes	Week number of first contact	4
Entry points	160	Week number withdrawn	5

The student came forward in week 4 and talked about feeling unsure about their ability to do university work. Despite assurances that they were at university on merit, and the availability of skills support, the student was clearly unsettled and unhappy. The situation was exacerbated somewhat by the fact that they were travelling a significant distance to attend university and also holding down a part-time job of 20 hours per week. She also mentioned that she was the first person in her family to attend university and expectations were high so the idea of leaving was very upsetting. After extensive discussion she decided it was best to leave, this despite the efforts of fellow students to persuade her to stay. It was stressed to her that there would be a place in the future if they wanted it and that the decision was the correct one to make.

Official withdrawal record: "Desired change in career and/or course"

By definition most of the early leavers were relatively straightforward in terms of the process leading to their departure because they were either identified early through lack of attendance at early seminars, or they themselves came forward. For some,

recognition and acceptance of a problem took a little longer. Student 155 is an example of this:

I.D	155	Number of contacts	5
Gender	Male	Number of discourses (F2F)	3(2)
Age	Mature	If resistant	No
Ethnicity	White	Withdrawal type	Early Leaver
Accommodation	Home	Result	Withdrawn
First generation	No	Week number of first contact	4
Entry points	460	Week number withdrawn	8

The student was contacted after missing two weeks in a row. They initially reported family problems but said that they would resume class soon. Poor attendance continued and in a subsequent meeting student suggested the course was not sufficiently demanding (This was a particularly bright student) and I advised him to think carefully about whether he wished to continue. Attendance continued to deteriorate and at a final meeting the student said that the stress of his personal situation, work and a lack of preparation for university was the main cause of the poor attendance. The student indicated that he would like to return at some stage and it was agreed that the best way forward would be to suspend studies until the following year.

Official withdrawal record: "Other Personal Reasons and dropped out "

Of the six students who deferred their studies (suspended), none of them subsequently returned. In retrospect it probably allowed students to save some face because they could at least say that they were assured of a place the following year. Both students 155 and 156 would be classed as NT in particular from the perspective of living at home, but students displaying traditional characteristics also left early but for different reasons than NT students. As mentioned earlier some students had simply made the wrong decision to come to university, or in some cases had attended because it was expected of them to do so. Student 153 exemplifies this type of student:

I.D	153	Number of contacts	1
Gender	Male	Number of discourses (F2F)	1(1)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Early Leaver
Accommodation	University	Result	Withdrawn
First generation	No	Week number of first contact	1
Entry points	380	Week number withdrawn	1

This student approached me very early on. They expressed doubt about being at university suggesting that they came because it was expected of them (the student displayed all the characteristics of a traditional student). Our conversation lasted an hour and it eventually transpired that the student wanted follow a career in entertainments/restaurant management but had come to university because of the wishes of his parents. It was mutually agreed that the student should withdraw but it was emphasised to him that he could return at any time in the future if he so desired. Also I suggested that he might want to transfer to another course at Huddersfield but he declined this offer.

Official withdrawal record: "Desired change in career and/or course

This theme of being influenced to attend university was quite common, with another 3 students, 148, 146 and 143 directly citing it as the main reason they came to university, and the evident source of their doubt about staying. These findings support those of Shedvin (1985) who identified that a significant number of leavers cited external pressure to attend. It must be remembered that many students cite peers and parents as major influences on their decision to attend university, but rather from a positive perspective.

Students living in university accommodation have an additional dimension to their university experience having to adjust and acclimatise to a new environment and develop completely new social relationships. For some students this adjustment is simply too problematic, for example students 136,154 and 161. All of these students found it difficult to settle early on and were clearly suffering from various forms of homesickness. The feeling of isolation and alienation was evident in several students who were enrolled on collaborative degrees, especially when they were the only students on that course. Student 157 indicates two problems of being in such a position on the Business with Design course:

I.D	157	Number of contacts	2
Gender	Female	Number of discourses (F2F)	1 (0)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Early Leaver
Accommodation	Home	Result	Withdrawn
First generation	Yes	Week number of first contact	2
Entry points	340	Week number withdrawn	3

Student stopped attending and I was informed by other students that she had left because she didn't like the course and she didn't like being the only business student. I eventually spoke to the student on the phone and she confirmed what other student had said. The course was not what she expected because there was little design content and she had no friends in design because "*they were very clicky and had found friends in induction*". I suggested she could switch to the business degree but she had wanted to do design and declined. She said that she had decided to take a year out and get a job.

Official withdrawal record: "Other"

The experience of this student reinforces findings of the likes of Lowe and Cook (2003) on the nature of student expectations and how they can be let down. This type of situation is very frustrating because there is little chance to talk to the student before they make their decision. The student wasn't resistant to support but the fact that the problem lay with one of the collaborative schools made it difficult to address

the problem. Again it is interesting that the student made no effort to approach the university preferring to simply leave, once again resonating with findings from a number of researchers (Bentley and Allan 2006; Chickering and Hannah.W. 1969)

Circumstantial leavers

Students classed as circumstantial leavers include those that generally experienced an underlying fundamental problem. This could emerge at any time during the course and would have the effect of causing stress and distraction to the extent that the student was simply unable to sustain commitment. This is the only common theme and the particular circumstances could vary significantly from student to student. Personal problems, bereavement, financial problems, leaving for employment and illness all figured, and sometimes in combination. As such the behaviour of students with circumstantial difficulties varied also. Some students suddenly left without there being any indication of a problem in which case efforts were made to contact them in order to elicit some reason for the withdrawal, for example student 125. This student was relatively forthcoming and happy to explain his reasoning which was evidently based on obtaining specific employment

I.D	125	Number of contacts	1
Gender	Male	Number of discourses (F2F)	1(0)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Circumstantial
Accommodation	Home	Result	Withdrawn
First generation	Unknown	Week number of first contact	18
Entry points	240	Week number withdrawn	18

Student had 80% attendance but suddenly decided to leave after getting accountancy apprenticeship. He said that on balance he felt it was better to get onto the job ladder whilst the opportunity was available.

Official withdrawal record: "Gone into employment"

Some circumstantial leavers were a little vague about their leaving decision, and student 130 is an example of this. Commonly this type of leaver would cite several reasons for their current difficulties. As stated in the log I got the feeling that this student did not really wish to discuss the issue and was reticent when asked what it was that he disliked about the university. There are many other examples of this type of response where various combinations are used, with the most common reason being employment cited by 6 of the 22 circumstantial leavers.

I.D	130	Number of contacts	1
Gender	Male	Number of discourses (F2F)	1(0)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Circumstantial
Accommodation	Home	Result	Withdrawn
First generation	Unknown	Week number of first contact	13
Entry points	Unknown	Week number withdrawn	13

The student failed to return after Christmas. I telephoned their home address and spoke to the student who said that they did not like the university. Also they said that travel distance was a problem and they had decided to look for a job. When questioned in more detail about dislike for the university, the student became reticent to continue.

Official withdrawal record: "Gone into employment"

Clearly any engagement with this type of student was difficult beyond the one discussion, and even though counselling was offered in some cases, it was never taken up. All that could be done was to record any discussion that subsequently occurred, but it was difficult to pin down the real underlying reason from this one contact. In a sense this process mirrors the problem that many retention surveys have in terms of reliability of student response.

From a personal perspective I was always conscious of respecting the privacy and integrity of individuals, and in some cases this meant I did not press students for reasons. The fact that a student had left without informing the university was indicative that they may not want to discuss their decision. In some cases of circumstantial withdrawal the underlying circumstances emerged, either immediately as the student made us aware of the problem or over a period of time because the student may for various reasons be reticent to raise the issue. Student 124 came to see me very early on:

I.D	124	Number of contacts	3
Gender	Female	Number of discourses (F2F)	3(2)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Circumstantial
Accommodation	University	Result	Withdrawn
First generation	Unknown	Week number of first contact	4
Entry points	Unknown	Week number withdrawn	11

Student had early problems not getting on with flatmates in halls of residence. Student was clearly unhappy and I advised her to speak to accommodation in an effort to change rooms. Student came to see me again to say she had tried to change but it was not possible and that she was really unhappy and was thinking of going home. Despite efforts of both her fellow course members and myself she did not settle and eventually returned home to be with family and partner.

Official withdrawal record: "Other personal reasons and dropped out"

Whilst this case could be classified under early leaving, because of the timing of withdrawal it was included as a circumstantial withdrawer, but it is indicative of the problem of withdrawal classification. The conflict with fellow students possibly exacerbated the problem of homesickness, and it was this lethal combination that led to the student's eventual withdrawal. Three students, 123, 116 and 121 all had genuine financial issues, but all three were international students and in all three cases there was extensive contact between myself and the students and as such I was fully aware of the problems. Unfortunately despite referral to the International office all three students eventually withdrew.

Late Leavers

The key unifying theme for the 31 students classed as late leavers is the point of withdrawal which tended to be during the second term. Furthermore most will have been identified as having difficulties at an early stage because of poor attendance and will have been contacted. A significant proportion of late leavers were classified as resistant (70% compared to 15% early leavers and 9% circumstantial leavers) and only around one discourse occurred for every four attempts to contact a late leaver. This compared with a one in two success rate in contact efforts for early leavers and circumstantial leavers. An example of the resistant late leaver is provided by student 95:

I.D	95	Number of contacts	9
Gender	Male	Number of discourses (F2F)	3(1)
Age	Young	If resistant	Yes
Ethnicity	White	Withdrawal type	Late leaver
Accommodation	University	Result	Withdrawn
First generation	No	Week number of first contact	3
Entry points	320	Week number withdrawn	13

Student attended poorly from the start. Several early attempts to contact him were ignored. When contacted for the first time the student said they were bored. Student was advised to consider changing courses and agreed to consider it. Attendance failed to improve and after several more contact efforts said they were still considering change of course. There was still no sign of making a decision and ultimately the student withdrew after citing wrong course choice as the reason.

Official withdrawal record: "Desired change in career and/or course "

Given the background of this student, and their residential status, he could be classed as traditional. It illustrates a common pattern amongst more traditional students of resisting withdrawal and may be related to the fact that they tended to have more invested in coming to university, in particular financially and psychologically. Furthermore they are often under family pressure to attend and subsequently to stay. It is interesting to note that several students who were having problems approached me to ask that I didn't inform parents. Whilst I informed that that it was not policy to converse with parents without their consent, I advised them to consult with their parents anyway.

In some cases where there was no response from students, or attendance had continued to decline and the student had failed to act on previously agreed conditions, the student was referred to the Dean of the Business School. This would invoke a further process whereby the student would be requested to attend an interview or write explaining their lack of attendance. 15 students received such letters and only 4 responded. All 15 students were ultimately withdrawn. An example of this process is student 98:

I.D	98	Number of contacts	6
Gender	Female	Number of discourses (F2F)	3(1)
Age	Young	If resistant	Yes
Ethnicity	White	Withdrawal type	Late leaver
Accommodation	Home	Result	Withdrawn
First generation	Yes	Week number of first contact	5
Entry points	Unknown	Week number withdrawn	17

Student advised that her attendance in first 4 weeks was poor especially in Business Operations and Accounts for Managers. She responded citing family problems apologised and committed to attending. Student stopped attending any modules and when eventually spoken to she had been ill and again said she would improve attendance. She failed to return after Christmas and avoided any efforts to contact her and fails to reply to both phone messages and mails. Mobile number was invalid. Student eventually referred to Dean and withdrawn for non attendance.

Official withdrawal record: "Other "

This type of avoidance behaviour is a common theme amongst late leavers. Whilst many of the late leavers were resistant to contact, some of them were not and had genuine problems. These students were generally late in leaving either because the problem only occurred late in the term or because the student made an effort to overcome the problem and persist. Student 103 is an example of the latter:

I.D	103	Number of contacts	5
Gender	Male	Number of discourses (F2F)	3(2)
Age	Young	If resistant	No
Ethnicity	White	Withdrawal type	Late leaver
Accommodation	Private	Result	Withdrawn
First generation	Yes	Week number of first contact	7
Entry points	140	Week number withdrawn	14

Student showed signs of poor attendance and was approached. In the first instance they said they travelled home of a weekend and was late to return on Mondays. The student was provided with a more suitable timetable without seminars of a Friday afternoon nor at all on Monday. Student attendance continued to deteriorate and further communication was made where the student then revealed that they worked long hours and sometimes had to do night shifts but admitted that they felt uncomfortable at university. After extensive discussion the student made the decision to withdraw and return home to find a job.

Official withdrawal record: "Other"

This student hailed from a small northern town entering university through a focussed scheme and their decision to leave could be seen as a complex combination of homesickness and culture shock. In a sense this case reflects much of the theorising on student-institution fit (Astin 1975; Summerskill 1962; Tinto 1975), and more contemporary ideas based around cultural capital (Bourdieu and Passeron 1977; Lehmann 2007). What is common here is the nature of how only after some time the real reason for the student difficulties is revealed.

Fail non-complete

The non-completion category includes all students who were not officially withdrawn before the final assessment point but failed to complete all the required assignments and assessments. NC students could be broken into two types, those that were identified as having difficulties at some stage before the end of term and those that gave no indication of problems during the year but then failed to complete. Out of the 52 NC students, 14 were of this latter category and all of them male. This type of FTP is rather perplexing because the students in question would have given no indication that they may be having difficulties and as such there would have been no need for them to be contacted. Additionally the fact that they had not completed would only become evident at the final exam board but in each case an attempt was made to contact the students. Seven of the students were spoken to but in most cases there was a perceptible reticence to discuss the issue and again I did not press the students. Of the 7 spoken to one student had an accident and decided not to sit the exams, three simply said that they did not want to take the exams, and two said they had become bored. One student said that they had gone on holiday and had decided to try and find a job.

The other 38 students displayed similar behaviour to, and generally reflected the characteristics and dispositions of late leavers with 16 out of the 38 being classified as resistant. Because of the fact that these 16 students generally avoided contact it was difficult to pin down any underlying reason for their poor attendance. With some I got the feeling that they had miscalculated the balance between social and academic aspects of the university experience, for example student 78:

I.D	78	Number of contacts	6
Gender	Male	Number of discourses (F2F)	2(1)
Age	Young	If resistant	Yes
Ethnicity	White	Withdrawal type	Fail non-complete
Accommodation	University	Result	Not withdrawn
First generation	Unknown	Week number of first contact	2
Entry points	Unknown	Week number withdrawn	Not withdrawn

Student first contacted in week 2 after missing several seminars. They said that they had been going out and had failed to get up of a morning. Student was advised to focus more on work. Attendance continued to be patchy and student contacted several times without response. Student sent a mail saying they had been ill but said they would start attending which they did for a couple of weeks. Half way through second term student advised to suspend or withdraw but refused, advised him to make good missing assessments. He eventually failed to appear for final examinations.

Official withdrawal record: "Not withdrawn"

This particular student was very able and likeable, and additionally very popular amongst his fellow students. The other 15 students used a variety of reasons when actually contacted but all declined any advice to withdraw. They also avoided referral to the Dean because whilst they might have had poor attendance it was not characterised by long periods of missing class. The remaining group of 22 students were remarkably similar to late leavers with the exception that they did not withdraw during the first year. These students would have been known to be having difficulty from an early stage and in each case support and advice was provided in an effort to help them through the particular problem they were having. In several cases it seemed to be a lack of motivation and indeed in 7 of these cases no specific reason was given. For the remaining 15 a combination of reasons was provided much like the late leavers.

Academic failure

The proportion of students that were true academic fails is actually quite small but it must be stressed that it only includes students that took all required assessments and additionally failed to achieve the required credits. Table 15 (systemic performance) indicates that 3.2% of enrolled students eventually failed academically whilst 7.4% were FNC. Comparing this to statistics for the university we derive figures of 7.1% and 5.2% respectively, and for the business school 10.5% and 2.8% respectively. In both cases academic fails are higher than FNC's reflecting a failure (more severe in the Business School case) to identify a student who has not completed all assessments. It is highly likely that many students who are actually FNC are recorded

as academic fails by the rest of the university, a practice that seems to particularly prevalent in the business school.

Out of the 24 students who failed academically, 13 had been contacted at some time during the academic year because of poor attendance. Some of the problems identified after discourse were remarkably similar to those reported by students who withdrew or failed without completing. The difference is obviously that these students persisted despite the problems but ultimately failed and we can assume that problem would have had an impact on academic performance. It would be tempting to deduce that the remaining 11 students who failed but were not contacted did so because of academic weakness but here again it may simply be that these students avoided the intervention process by ensuring that periods of absence were minimised. A final indication of the problems of both academic fails and FNC students is indicated in the average attendance of such students. This was 51.3% and 50.4% for fails and FNC respectively, compared to 73.3% for students that progressed.

A reader may be excused for posing the question as to why many of these students were not referred to the various sources of support available within the institution. In some cases students were referred, especially were it was a serious personal related problem, and where finance was cited as being a problem. Also all the students were made fully aware of all the various services that were available. Each case though was taken on its own merit and I found that a student who was having problems generally would end up being one of the FTP categories. Only in a very small number of cases would I say that a student having problems we were able to turn around, but these instances are difficult to identify because they may have persisted anyway.

6.3 Solution evaluations.

Three general areas for solutions were outlined in chapter 3. Activities before students arrive, and activities after students arrive, subdivided into bolt-on programmes and institutional change. Evaluation of retention solutions before students arrive is beyond the scope of this thesis, but it was possible to evaluate solutions implemented during the course. The 2 key areas outlined in chapter 3 were bolt-on solutions and institutional change. The two specific solutions that were evaluated were academic

skills support (ASS), which is classed as a bolt-on solution, and changing the teaching delivery system, which comes under institutional change.

6.3.1 Evaluating a bolt-on solution: Academic Skills Support (ASS).

The first important issue was to ascertain how many students made use of the Academic Skills tutor to seek help with the operations assignment and this is indicated in Table 29. There is a clear increase in the number of visiting students between 2004 and 2006, due in part to the presentation of student average performance figures for the operations assignment in induction week. Clearly this would not be possible in 2004 because it was the first year of the experiment. The low figure for attendees in 2007 was partly due to the changing role of the Academic skills tutors who were spending more time delivering academic skills to large groups of students in the first term and as such their availability for individual and small group consultation was somewhat reduced.

	2004	2005	2006	2007	Total
No of students taking module	94	114	109	88	405
N ^o students visiting	12	39	42	20	113
% of student who visited	12.8%	34.2%	38.5%	22.7%	27.9%
N ^o students not visiting	82	75	67	68	292
% of student who did not vist	87.2%	65.8%	61.5%	77.3%	72.1%
Average mark for visitors (A)	74.2%	68.5%	61.4%	62.6%	65.4%
Average mark for non visitors (B)	62.7%	62.2%	57.5%	59.2%	60.5%
Percentage point difference A-B	11.5%	6.3%	3.9%	3.4%	4.9%

Table 29 Student academic skills visitations and average performance 2004-2007

The average percentage mark for the first operations assignment that the cohort obtained is in the lower part of the table and is presented for both those visiting and not visiting ASS. Whilst it is clear that the students who did seek help achieved higher marks it seems that the difference declined over the period of the observations and stabilised from 2006.

The high marks for those seeking help in 2004 and 2005 could be explained by a number of things. Firstly the higher number seeking help in 2005 suggests that more of the non-traditional and less academically qualified students sought help than in

2004 thus bringing down the average mark for those seeking help. Furthermore in 2006 and 2007 students were consulted in groups rather than individually by skills support and this may go someway towards explaining the low marks of visitors in those years. Additionally the low figures for both students visiting and not visiting in 2006 would be partly explained by the high proportion of students whose first language was not English (35% compared to an average of 16% for the years 2002-2006). These students have specific language problems to overcome at an early stage, and certainly many of them struggled with this qualitative piece of work so early in the term. In 2007 any non English speaking students were able to access skills support specialising in both academic skills and non-English speakers.

		Visited ASS	Did not visit ASS
ب	Male	40	191
Idei	Iviale	17.3%	82.7%
Gender	Female	73	101
	Female	42.0%	58.0%
	UCAS	108	243
_	UCAS	30.8%	69.2%
Entry method	Transfer in	4	12
net	I I ansier m	25.0%	75.0%
I N I	Late applicant	1	18
Ent	Late applicant	5.3%	94.7%
	Repeat student	0	19
	Repeat Statent	0.0%	100.0%
	0-160 pts	11	56
	0 100 pts	16.4%	83.6%
Entry points	161-260 pts	24	70
bo	101 200 ptb	25.5%	74.5%
ıtry	261-360 pts	34	42
Ēr	_01 000 ptb	44.7%	55.3%
	361 pts and over	15	14
	bor pis und over	51.7%	48.3%
uo	1st Gen	126	71
1st generation	150 001	64.0%	36.0%
1 ene	Not first gen	80	30
ස්	100 mot Sen	72.7%	27.3%

Table 30 Who makes use of ASS

Despite the differences between years, what is evident is the difference in performance between students who made use of skills support and those that did not. Over the whole sample this amounted to 5 percentage points or half a grade and immediate deduction suggests that the difference is due to the effects of skills support. This deduction may be dangerous though because of other student related variables or issues that could at least contribute to the difference. Table 30 provides an analysis of the rate of visitation to ASS based on 4 variables that are considered to have an impact on student success and these are gender, entry method, the entry tariff or academic entry points for students, and whether they are first generation.

Across all of these dimensions it would seem that students who are likely to be more successful in terms of performance are more likely to seek out help with academic skills. This suggests that the students who are in need of additional academic support; that is males, students who enter by methods other than the UCAS route, students with low academic qualifications, and first generation students are not availing themselves of such support. It is perhaps the academic entry point variable that is most indicative since this variable is widely acknowledged to be the best indicator of student success. Only 16.4% of students with less than 160 entry points are likely to seek out help whilst 51.7% of students with over 360 points are likely to do the same. This empirical evidence provides strong support to a problem recognised by many related to the poor uptake of services by NT students (Bentley and Allan 2006; Chickering and Hannah.W. 1969; Colton.G.M et al. 1999).

_			D	С	В	Α	Total
		Did not visit ASS	10	48	80	18	156
	Mala	Dia not visit A55	6.4%	30.8%	51.3%	11.5%	
Gender (N=351)	Male	Visited ASS	2	6	20	10	38
Ž		visited ASS	5.3%	15.8%	52.6%	18 11.5%	
ler (Did not visit ASS	1	30	35	20	86
ienc	Female	Diu liot visit A55	1.2%	34.9%	40.7%	23.3%	
0	remate	Visited ASS	1	14	27	29	71
		Visited A55	1.4%	19.7%	38.0%	40.8%	
		Did not visit ASS	5	16	20	6	47
	0-160	Diu not visit A55	10.6%	34.0%	42.6%	12.8%	
	0-100	Visited ASS	1	3	3	12.8% 3 30.0% 11 17.2%	10
		VISILEU ASS	10.0%	30.0%	30.0%	30.0%	
		Did not visit ASS	1	20	32	11	64
243	161-260	Did not visit A55	1.6%	31.3%	50.0%	17.2%	
Entry points (N=243)	101-200	Visited ASS	0	2	10	11	23
ts ()		Visited A55	0.0%	8.7%	43.5%	47.8%	
oin		Did not visit ASS	1	12	19	7	39
ry p	261-360	Did not visit A55	2.6%	30.8%	48.7%	17.9%	
Ent	201-300	Visited ASS	1	3	21	9	34
		VISILEU ASS	2.9%	8.8%	61.8%	26.5%	
		Did not visit ASS	0	3	5	3	11
	Over 360	Did not visit ASS	0.0%	27.3%	45.5%	27.3%	
	0101 300	Visited ASS	0	0	5	10	15
		visited ASS	0.0%	0.0%	33.3%	66.7%	

Table 31 Academic performance of visitors and non-visitors to ASS

In order to indicate the effect of skills support on student performance we can compare the performance of particular groups by whether they made use of ASS or not. Table 31 provides such a comparison for two variables, gender and entry points. The number and percentage of students obtaining a particular grade is provided for all categories by whether ASS was used. Irrespective of gender, or the number of entry points a student has, visiting ASS for help in the Operations assignment has had a beneficial impact on outcomes. All categories show substantially more A grades for students who visited ASS. This would seem to give a clearer picture of the effects of skills support and on this evidence it would seem that use of skills support for a specific purpose, in this case a written assignment, can have a substantial impact.

Students who did make use of the ASS generally reported that it had been useful especially for understanding what was expected in terms of structuring a university essay, and one student pointed out at a later date that this first visit had helped them in subsequent assignments in other modules. Another non-traditional student who had

already made it known that she had no idea of how to do this assignment said that it had been very helpful for technical aspects, but more importantly that it had given her self-confidence to be able to do university work. This theme was quite common especially amongst the non-traditional students who had used ASS. It lends strong support to the findings of Smith (2004) who identified that willingness to use services by NT students contributed to higher performance and improved retention for that group. The problem is persuading a greater proportion of students deemed in need of support to access it.

ASS and retention

Identifying if ASS has an impact on retention is somewhat more problematic because retention outcomes only become evident over a longer term and as such can be influenced by many other intervening variables. Combining data on student use of ASS for both the Operations assignment and subsequent visits during the term, table 32 presents various combinations in terms of level of use of ASS throughout the term, and gauges these combinations against retention.

	Progress	Withdraw	Defer	Fail	Fail NC	Total	Course mark %	Average entry points
ASS not visited	197	37	1	6	20	261	53.7	234
at all	75.5%	14.2%	0.4%	2.3%	7.7%	201	55.7	n=162
ASS not visited for Operations	29	1	0	0	1	21	56.61	189
and at least one visit during term	93.5%	3.2%	0.0%	0.0%	3.2%	31	56.61	n=20
ASS visited for Operations	80	3	0	1	0	0.4	(1.17	282
but not thereafter	95.2%	3.6%	0.0%	1.2%	0.0%	84	61.17	n=61
ASS visited for Operations	27	2	0	0	0	20	64.16	289
and at least one further visit	93.1%	6.9%	0.0%	0.0%	0.0%	29	64.16	n=17

Table 32 Retention of ASS visitors and non-visitors

What this suggests is that students who visit ASS at least once during the term, have around a 93-94% chance of progressing to the second year, and students who make no use of ASS progress just over 75% of the time. The problem with taking this at face value is that as already indicated students who do not use ASS are also likely to have characteristics indicative of non-traditional students. Perhaps one of the most concerning aspect of these statistics besides the low uptake by non-traditional students, is that despite the positive reports of most students who used the service only 29 of those who made a visit for the operations assignment made a subsequent visit.

Also despite the publicity in induction and subsequent exhortations by all academic staff for students to make use of the service only 31 who had initially not used the service for the operations assignment subsequently did. What is particularly interesting about this group of students is the significantly lower average entry points compared to all the other students, including students who did not visit ASS at all. It seems that this group of NT students perhaps did not have the 'cultural capital' (Bourdieu and Passeron 1977) to visit ASS for the operations assignment at the beginning of term, but that they had the motivation to subsequently visit ASS later. What we are witnessing here is the highly motivated NT student, and it provides some evidence for the phenomenon of successful NT students identified by Allen (1999)

6.3.2 Evaluating institutional change

The change in the teaching delivery system from the classic lecture-tutorial mode to single 2 hour seminars occurred in 2004. Because consistent data had been collected over the period 2002-2008 this would allow evaluation of this change to take place by comparing students who studied under the lecture system with those who subsequently studied under the seminar system. Evaluation covers three general areas, firstly the effect on timetabling and student attendance, secondly the impact on student performance and systemic retention and finally the effect on students themselves and their reactions to and perceptions of lectures and seminars.

Timetabling and attendance

One of the major advantages of the change to seminars was the flexibility it produced and the change in production focus from timetabling for the benefit of the academic/institution to timetabling for the benefit of the student. Figure 6 shows an example of a student timetable from the 2003-2004 academic year. The time slots are in hours and the time represents the start time of that particular hourly segment. The five core subjects each have a 50 minute lecture indicated by the letter "L" in brackets after the module abbreviation and a tutorial indicated by "T". The one lecture for each module will normally house all the students on the module, sometimes upwards of 100 students and there would be around 6 or 7 associated tutorials with theoretically 10-15 students in each. Because there are three options the option seminar will contain around a maximum of 30 students. The lectures and options are obligatory for students taking that module (all options are scheduled at the same time) but the tutorials can run at various times during the week.

	09:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15	18:15
Monday		MG(L)		IB (T)	MI(T)					
Tuesday	Op	tion		IB (L)					OP (L)	
Wednesday										
Thursday		OP (T)				MG(T)				
Friday		AC (L)	AC (T)				MI(L)			

Figure 6 Pre-2004 student timetable

This system ran in 2002 and 2003 and observations of student behaviour and frequent discussions with students during this period revealed a number of problems based around attendance (Duty 2003). In conversation with students it transpired that many would stay away from class because of poor standards of teaching and the unhelpful attitudes of some staff. In some cases students would gravitate toward tutorials in which they perceived a better standard of teaching thus creating a very unbalanced system. It became difficult policing the system because as a student stated " *why should I go to a tutorial when the tutor clearly has no idea what they are talking about and doesn't seem to care if we are learning anything*". Other reasons revolved around the structure of the timetable and its inflexibility.

In terms of structure students cited a number of specific problems such as large gaps between sessions on a single day. So for example in figure 6 on Tuesday there is a four hour gap between the IB lecture and the OP lecture and the consensus was from the vast majority of students that they would more than likely go home after the IB lecture especially if they were commuting students, in fact students were rarely prepared to wait around for more than a couple of hours at most. Furthermore many students commented on the general inflexibility of the timetable in relation to personal circumstances particularly where students were working or had other personal commitments outside of university as many commuting students did. These problems are broadly similar to the findings of Yorke and Longdon (2006:40-42) where students cited organisation and management issues as being the second most important change they would like to see addressed.

_	09:15	10:15	11:15	12:15	13:15	14:15	15:15	16:15	17:15	18:15
Monday	М	G	Ι	В						
Tuesday										
Wednesday										
Thursday			А	С	Ν	II				
Friday			OP	TN	0	Р				

Figure 7 Post-2004 student timetable example

Figure 7 shows an example of a student timetable for the 2004 academic year. The single lecture and associated tutorials are now replaced by four identical two hour seminars with around 20-25 students in each seminar. What is evident here is the potential flexibility of such a timetable because there are fewer obligatory sessions. An example of the advantages of this system for initial timetabling of students was provided when student who had a place rang me around 3 weeks before the term started. She was concerned about the timetable she would be receiving in particular because she had two young children and had commitments in terms of dropping off and picking them up from school and also the arrangement of childcare. I invited the student in to discuss her requirements explaining that she could do this and we were able

to provide a timetable that fitted around her circumstances. The student graduated four years later with a first class honours degree.

A similar approach was taken in induction week for the whole cohort when each student was provided with a blank timetable and asked to fill in slots when they were not able to attend university. Many of our students are living locally and already have jobs, and additionally students may have other commitments, but where a student declared these they were asked to provide evidence. This then allowed us to provide personalised timetables thus potentially reducing the inconvenience inherent in previous timetable structures. The flexibility also extended to term time when often a student's circumstances can change. An example of this was provided with one of the East European students, many of whom work in difficult conditions with unsocial hours and in jobs that often many people will not do. Often these students are both poorly paid and treated badly. In this particular case the student had been told by their employer that they would have to change their shift, the alternative being losing their job. Because of the flexibility in the timetable I was able to construct a completely new timetable for the student, a process that was carried out with the student.

This occurrence was not uncommon especially for East European students, but the flexibility applied to all situations where students were forced by circumstance to have to change. Furthermore the system also permitted short term flexibility, if for instance in a particular week a student missed a seminar they could (unless it was the last seminar of the week) catch a later seminar. Fortunately this did not occur on a frequent basis and in most cases only required minor changes to perhaps one or two modules so there was no serious threat to misbalancing the seminar sizes. Additionally because there was one tutor for all four seminars the problem of students gravitating toward what they conceived as the better tutors and thus causing a misbalance in assessment loads for tutors, was eradicated. Of course if the teaching was perceived to be poor, or the module badly organised, this caused problems for the whole module rather than in separate tutorials. This problem is examined in the next section on attendance.

Effect on attendance

Figure 8 shows the average attendance in each of the core modules between 2002 and 2008. This clearly shows that across all modules there was an increase in attendance rates in 2004 and this was sustained through 2008. Given the change to seminars in 2004 across all five core modules it would seem to be safe to assume that this is the main reason. The flexibility of the seminar system clearly contributed to the higher attendance rates, making it generally easier for students to attend. Additionally the nature of the 2 hour seminar avoids the fractured learning endemic within the lecture-tutorial system.



Figure 8 Attendance by module 2002-2008

There are two points of clear deviation in this pattern though, in 2005 for IB and 2007 for MI. In feedback from students, and on a more formal basis in staff-student liaison meetings, both of these modules were roundly criticised for a combination of poor organisation and poor teaching. This may explain the low attendance in both of these modules in particular years. Attendance in Accounting for Managers shows an improvement in 2004 in line with the seminar introduction but also there is an increase again in 2006 which is sustained through to 2008. In this case there is a structural reason in that in 2004 and 2005 there were four different tutors each teaching one of the seminars. This provided for a variable student experience and

caused problems resulting in student complaints. The department though was quick to realise the nature of the problem and subsequently one tutor was used for all four seminars from 2006.

A final point to note is the slight increase in attendance in 2006 and 2008 coincidentally the years when high numbers of EU students from eastern EU countries were recruited. The average attendance of home students who studied under the seminar system was 76.2% (sample size 364) whilst east EU students achieved an average of 85.4% (sample size 52) under the same system. This phenomenon would also explain the drop in attendance in 2007 across all modules when only a small number of east EU students were recruited.

The impact of seminars on student retention and progression

Reference to table 33 indicates the changes in progression rates between 2002 and 2008. Progression is relatively low for the period 2002-2004 then it increases in 2005 and stays at the same rate until 2008 when it falls again. The seminar system was in operation between 2004 and 2008, so establishing the impact on progression is challenging. Chapter 4 has already presented the problem of establishing causation links between retention initiatives and retention performance, so the task at hand was to isolate specifically what impact that seminars might have had, and to identify what may have caused the low progression figures for 2004 and 2008.

	2002	2003	2004	2005	2006	2007	2008	Total
% of students progressing as a proportion of those enrolled	75.5%	67.3%	76.8%	81.6%	80.7%	82.1%	73.6%	
Number of students completing all assessments (a)	81	81	74	94	91	89	92	602
Students passing all assessments (b)	74	74	73	93	88	87	89	578
Academic success % (b/a)	91.4%	91.4%	98.6%	98.9%	96.7%	97.8%	96.7%	95.9%

Table 33 Progression and academic success

The key to understanding the impact of the seminar system is in students' academic performance. Reference to table 33 indicates the number of students that progressed as a proportion of those that completed all the assessments (academic success %). In 2002 and 2003 an identical percentage of students failed academically, giving a 91.4% academic success, but in 2004 when the seminars are introduced this increases to 98.6% and is sustained at a high rate through 2008. This gives an average of 91.4% academic success rate under the lecture-tutorial system and 97.7% under the seminar system. Average progression was 71.4% under lectures and 78.96% under seminars. This would suggest that that changing to the seminar system does have an impact on retention, predominantly through its effect on enhancing student academic performance.

The poor progression performance in 2004 and particularly in 2008 must have been caused by other variables. In 2004 the academic pass rate was 98.6% but only 76.8% of enrolled students progressed to year two. Reference to table 14 indicates that of the 95 students enrolled in this year, 13 (13.7%) of them were repeat students. At the time due to what were low recruitment rates we were under pressure at the coal-face to increase enrolment and one of the quickest ways to do this is to slacken the entry requirements for repeat students who would normally be counselled extensively. The relatively high number of voluntary withdrawals in 2004 is partly explained by this policy (repeat students have a 45.7% probability of progressing).

2008 witnessed an academic pass rate of 96.7%, but only 73.6% of the enrolled students were eligible to progress to year two. Two collaborative degree programmes, Business and Psychology, and Law and Business were identified as problematic here. In Business and Psychology two of the six East European students on the course failed to progress mainly because of the lower academic ability of the 2008 east European group compared to the 2006 cohort¹³. The Law and Business degree proved problematic in a different way. Because these students did not take the Business Operations module it meant that they were not taught by me, which meant I had no contact with these students beyond the attendance reports for the business modules they did take. It only transpired at the end of the academic year that there had been problems with some of the law modules when 7 out of the 17 students recruited failed to progress. Of the seven students who failed to progress, six of them were classified as fail non-complete, and the effect of this can be seen on table 15 with 11.6% of the 2008 cohort being fail non-progress. It subsequently transpired that the attendance of most of these students in their Law modules had been poor, but because this was not fed back to the year team, no intervention could be made. Reference to table 24 indicates the impact on overall retention rates by course type if we omit 2008 from the calculations thus adding evidence to support the reason for poor progression in 2008.

There is a strong indication here that the seminar system impacts retention through its impact on student learning and student performance but we must be careful though because by our own admission systemic retention can be affected by many variables. One such potential variable is a change to the assessment regulations where rules are changed that could have an impact on progression rates. Examples would be allowing students to retake all assessments, lowering pass rates and so on. Discussion with senior registration staff found that there were no significant changes in assessment but in order to eliminate any possible impacts that could account for the change in 2004 further analysis can be made.

The impact on student performance

Having identified the indirect impact on retention of seminars it is worth delving a little deeper into some of the student related impacts. Figure 9 clearly indicates that

¹³ In 2006 the 25 East European students achieved an average of 61% for the course, whilst the 18 East Europeans in 2008 achieved an average of 58.3%.

there was an increase in average performance across all five modules in 2004 and this was broadly sustained through 2008. One particular module seems to stand out in 2006 and this is Managing Information. In 2004 and 2005 there was a modest increase on 2002 and 2003, but 2006 saw an increase in average performance of nearly 8 percentage points. Managing information is the one core module that has been problematic throughout and unlike the other four core modules a situation was never reached whereby one tutor took responsibility for teaching the whole module. In 2006 this was attempted but the tutor was absent through illness for extensive periods and the students essentially received only a proportion of the allotted teaching and by stand-in staff. Concerns for student performance in 2006 led to a compensation exercise and student marks were adjusted to take account of the problems that had occurred.





The problem with this module continued into both 2007 and 2008. In 2007 the assigned tutor was again absent for a significant period and in 2008 students complained about the standard of the teaching of the new tutor. Once again teaching staff were replaced part way through. This entailed changing assessments and again it is likely that the figures for both 2007 and 2008 are artificially inflated. It is probably

safe to assume that 2004 and 2005 are reliable figures for performance to compare with 2002 and 2003. In both of these years the module was taught by staff whose speciality was statistics and mathematics.

The average marks of the seminar cohort are clearly and consistently above those of the lecture-tutorial cohort across all five modules from 2004, so it would suggest that this was caused by the change to the seminar system. Explaining the increase is more of challenge, but again we must assume that student learning is improved in smaller groups. Interestingly there is a strong correlation between student performance and attendance so it may be that the improvement in student performance is partly as a result of the increase in attendance experienced under the seminar system.

We can investigate further and analyse the impact that lectures and seminars had on different types of student in order to further isolate the impact of seminars on performance. Table 34 uses 4 key categories that represent a mix of both background variables and academic qualifications, and compares the average marks attained by these groups under both lectures and seminars. The categories of gender and ethnicity within each type should contain a cross section of the cohorts in terms of ability, motivation, qualifications and so on. This circumvents the problems identified in chapter 4 around the issue of self selection and hidden variables in particular motivation. It should also be noted that east European students have been omitted entirely because almost all of them studied under the seminar system.

		A Lecture % performance	Sample size	B Seminar % performance	Sample size	Difference (B-A)
Gender	Male	46.8	111	53.8	247	7.0
Gen	Female	49.8	68	58.9	161	9.1
	White	49.5	129	57.8	278	8.3
icity	Asian	43.0	34	51.6	85	8.6
Ethnicity	Black	33.7	3*	52.9	23	19.2
	Chinese	50.1	12	50.3	13	0.2
Age	Mature	44.9	25	53.2	65	8.4
βA	Young	48.4	154	56.4	341	8.0
	0-100pts	31.9	3*	46.1	9	14.2
int	101-200pts	43.8	49	50.9	83	7.1
Entry point	201-300pts	52.0	39	56.4	117	4.4
En	301-400pts	63.6	16	63.7	73	0.1
	Over 400pts	63.4	2^{*}	69.6	18	6.2

* Unreliable due to small sample size

Table 34 Relative performance under lectures and seminars¹⁴

The right hand column indicates the difference in performance between seminar students and lecture-tutorial students. Across the variables of gender, ethnicity and age the gains are broadly similar at around 8 percentage points. When the means of all home students are compared this gives an average of 47.7% for students studying under lectures and 56.2% for students studying under seminars. This result is in line with Hotchkiss et al (2005) who found that students gained around ³/₄ to a full grade when studying in a learning community compared to the traditional large groups.

Under ethnicity there are two exceptions that stand out. The gains indicated by black students is unreliable because of the small sample for students who studied under the lecture-tutorial system, but the lack of any gain at all for Chinese students provides an

¹⁴ The categories for gender, ethnicity and age exclude statistics for East European students because these students are predominantly female, mature and all of white ethnicity. Furthermore 95% of East European students studied under the seminar system.

interesting deviation. The explanation for this may be linked to the culture of these students and their general preference for a passive non-interactive learning environment. Very rarely would they ask questions or seek help, and found it uncomfortable working in groups.

The final category is based on student's entry points and presents a radically different picture than the background variables. The vast majority of students on the business programmes are represented by the three central categories and enter with between 100-400 points. Thus the low sample sizes for the two categories either side of this, 0-99 points and over 400 points. The pattern is very clear here with a negative association between entry points and performance gain under the seminar system. This consistent pattern of gains is dramatically broken when student entry points are considered. The results for students with less than 100pts and for those with over 400 pts are generally unreliable because of the small sample size for the lecture-tutorial students, but in total this only represents around 10% of the total students. What these data show is that the seminar system has an increased benefit the lower the entry points of the student. This supports the findings of Drane et al (2005) who found that minority students, i.e. those generally less qualified and displaying non-traditional characteristics made greater gains from working in small groups than did their traditional counterparts. It also resonates with the results of Wolff et al (2008) who identified improvements in the performance of foreign students as a result of changing the curriculum and teaching methods on a course.

Why this might be the case could be linked to the idea that students who enter university with high entry points are likely to display other characteristics of more traditional students, in particular they are more likely to possess those components of cultural capital that facilitate success within the traditional university culture such as learning in the lecture environment. One could assume then that students with lower entry points will have a different type of cultural capital and perhaps the use of the seminar system in a sense is enhancing the value of that cultural capital within the learning context of the University. These results provide evidence to support much of the theory suggesting institutional change as a way of addressing student success and retention (Crosling et al. 2008; Thomas.L. and Cooper 2000; Zepke and Leach 2005), in particular through changes to what happens in the classroom (Tinto 1997; Tinto 2000).

The only evidence that does exist for specific effects of institutional change is based around the impact of learning communities. The results here reflect the findings of several evaluative studies that generally indicate an improvement in student performance and retention for students who studied in learning communities when compared to students studying under more traditional systems (Fidler 1991; Johnson 2001; Soldner et al. 1999; Tinto 1997). The results in this thesis are more reliable than previous evidence because it considers a complete cohort, not a cross section or sample of the population. These results also go further than most previous research in that they show the relationship between academic ability and the type of learning environment.

Student perceptions of seminars and lectures

From personal observation I found that teaching the seminar was a far more rewarding activity than the traditional lecture and this opinion is shared by the other tutors who are part of the year one team. Students as a whole also seemed to like the seminar system, although most professed to being surprised at its use. In one of the Business Operations seminars in around week three or four the conversation had steered away from Operations Management to the learning environment the students found themselves in, one commented:

I thought I would be sitting in a big lecture theatre with loads of other people, this is not like you see it on the telly and stuff, you know with loads of people listening to some Professor dude, but its ok, it's a lot like school and I like it because you can get to know people.

Whilst the quantitative data can give us the data to evaluate the effects of the seminar system, we can only hypothesise as to why the seminars seem to have been so effective. More in-depth data were provided by the survey administered to year 2 students. As presented in the methodology two types of questions were set, students were asked to list up to 3 things they liked and disliked about both the lecture-tutorial and seminar systems, and also they were provided with the opportunity to makes more elaborate comments. The first type of question produced a large number of short statements which were initially classified into a significant number of themes. These

themes were then analysed and grouped into a smaller number of representative themes and it is this aggregated list that is represented in tables 35 and 36. The second type pf question was open in that it provided the opportunity for students to articulate in more depth their thoughts about both systems.

The total number of comments is presented for each of the four areas, and then under this is the number of comments per student (sample size 120). What is evident in comparing the two tables is that the results on one table are a negative mirror of those on the other table. For example there are 1.88 positive comments per student for seminars and 1.77 negative comments per student for lectures. Similarly there are only 0.89 positive comments per student for lectures and 0.77 negative comments for seminars. The picture that is presented here is one of clear preference for the seminar system, but this must be viewed with some caution. Even though the students were asked to compare seminars with lectures it is likely that they would also associate the close level of support they received on the business programme in the first year with the seminar system. Thus there may be an element of comparison between the first and second years in terms of the level of support that had been received overall rather than a straight comparison of lectures with seminars. This is aptly indicated in the comments of one particular student where the emphasis is on the whole experience of year 1 compared to year 2:

The student is clearly referring to the nature of support and there is little if any reference to seminars or lectures. What this does indicate is the benefit of focussing retention efforts on the first year and engaging students early, a policy that is strongly advised by many and has been shown to improve retention and student satisfaction (Petschauer and Wallace 2005). An interesting point to note here is the comment relating to the cost of the course, more like an irate customer than a student.

After getting brilliant results in year one and enjoying the learning methods you get to year two where tutors don't know your name and coursework is given with little feedback or guidance as to what they are looking for and the approach you as a student can take. After getting back some year two coursework results and getting only 50+I feel I have not had any guidance or help with what I am doing and after paying £3000 for poor teaching this could mean I will not achieve the high degree I thought I was capable.

LECTURE-TUTORIAL		
Positive Responses		
Total number of responses	107	-
Number of responses per student	0.89	
Short, flows faster, get through work, splits up time	23%	SO
Good if the lecture-tutorial system works as it should	20%	TL
Good for information, knowledge accumulation, getting notes	18%	TL
Easy to hide, use phone, not attend, sign in friends	6%	SO
Good if teaching is good	4%	TL
Relaxed can concentrate, no interruptions	4%	TL
In same class with everyone	4%	SO
Can be anonymous, don't have to join in if don't want	3%	SO
Simple structure easy to follow, predictable	3%	SO
Good for independence, self study	2%	TL
Lecture room is big, lots of space	2%	SO
Negative responses		
Total number of responses	207	
Number of responses per student	1.73	
Can't ask questions, no interaction, one-way communication	43%	CI
Poor teaching, limited methods, "Death by Powerpoint", Boring	34%	TL
Too fast to take effective notes	23%	TL
Disruptive and noisy, too many distractions	18%	TL
Too many people in lecture	14%	SO
Lecture-tutorial system doesn't work/not organised	13%	SO
Difficult to concentrate/easy to switch off	12%	TL
Inconvenient timetables, no breaks, too long	10%	SO
Learning issues, don't learn anything	3%	TL
Lack of resources, no handouts	2%	TL
Lecturers teach to willing small group and ignore rest	1%	TL
Pointless attending if stuff on Blackboard	1%	SO

Table 35 Positive and negative responses for the lecture-tutorial system
SEMINAR		
Positive Responses		
Total number of responses	225	
Number of responses per student	1.88	
Can ask questions and contribute	46%	CI
Good tutor-student interaction, more personal	35%	CI
Better learning environment, learn/understand more.	33%	TL
More time to learn, breaks, easy to make notes	19%	TL
Interactive teaching, variable methods, good teaching	16%	TL
Interaction with peers, group work.	16%	CI
Convenient timetable, easier to attend.	13%	SO
Can concentrate, few distractions	10%	TL
Negative responses		
Total number of responses	92	
Number of responses per student	0.77	
Too long, time can drag	25%	SO
Too long if break too short or no break.	13%	SO
Poor teaching makes it boring and too long	11%	TL
Concentration problems towards the end	9%	TL
Boring	8%	TL
Not enough theory, too much discussion	7%	TL
Room size, seminar size, breaks, timetabling	3%	SO
Too much material	1%	TL

Table 36 Positive and negative responses for the seminar system

The right hand column to both tables 35 and 36 shows a classification based on three general issues. The top issue is related to the level of interaction between student and tutor, and the concomitant opportunity for students to engage in a two-way discourse within the learning episode (CI). A secondary issue is related to various aspects of teaching and learning (TL) and encompasses a wide selection of the themes. A final issue is related to structural and organisational issues (SO) and is a general catchall for themes not classed in the first two issues. These three classifications from the aggregated themes in both tables will be used as a framework to enable a thematic analysis to be undertaken. Integrated into this will be the additional comments that students made.

Communication, engagement and interaction

Various authors have identified a strong link between the level of interaction between students and staff in the classroom, and retention (Munro 1981; Panos and Astin 1968; Pascarella and Terenzini 1980). This is supported here with the primary issue

being that of the level of communication and interaction between students and academics. This featured as the top two categories for positive aspects of the seminar system, with 46% of students citing the ability to engage in a two way discourse in the seminar, and 35% commenting in a more general away about the ability to generate a relationship between tutor and student. It also represented the top negative aspect of the lecture system with 43% of students suggesting the lack of interaction and inability to ask questions as problematic. Many of the written comments referred directly to these benefits, especially the ability to ask questions and interact with the tutor:

I think the seminar system enables people to learn better. This is because there are less distractions and you can ask the tutor to clarify things and re-explain things again. Also it allows you to build up a relationship with the tutor so if you need to speak with them about the module it is much easier.

The clear comparison between lectures and seminars was articulated by several students. Often this was intermixed with teaching issues, for example:

The seminar system was by far the better system. I felt I was learning and interacting with others I also felt that could approach the teacher whenever I needed to. The lecture system is old fashioned and too theory based. We come in and copy notes at the speed of light and we never feel like we are learning but just copying. This method of learning takes more time to learn and digest.

Also here is a mention of the ability to interact with peers, and whilst this was overtly noted as a positive aspect of seminars by only 16% of the students, nevertheless there was an underlying implication that peer interaction was present in many of the positive comments related to interaction and learning. Some students did make a comment specifically about interaction with peers, for example:

I think that in seminars the students have a better chance to get to know each other especially if every student would be mostly staying in the same seminar groups (high school style of teaching).

This statement encapsulates quite effectively the way in which students, perhaps particularly NT students feel comfortable in the seminar system because it is a familiar type of learning setting. As well as being able to interact with peers, some students recognised the combined impacts of seminars on learning: Seminars I think are the best way of getting the work across. Small groups make it easy for students to work with each other plus the teacher can help students until they understand what they are stuck on rather than worry about having a lecture room full of students waiting.

Clearly being taught in small consistent groups serves not only to generate the levels of interaction often found to be necessary components of effective retention efforts such as peer and faculty interaction, and student engagement, but it also has a strong element of learning.

Teaching and learning

Many aspects of both teaching and learning were raised by students. It is interesting to note that most the responses for the lecture system were based around aspects of teaching, but mostly from a negative perspective. The second most important negative issue for lectures was poor teaching (35%) although it may be that students automatically associate straight lecturing with poor teaching. At 23% the third highest response was related to the difficulty many found making notes because the lecture was too fast. In a sense these issues are related to the lack of interaction because students who don't understand are unable to clarify understanding through questions. Many of them then feverishly attempt to take notes without really understanding what is being said and students often subsequently blame the standard of teaching. For some students the nature of the seminar system enables some of these key tasks to be carried out and thus contributing to learning:

The seminar system was better as it gave direct teaching. The information was covered better and in more clarity. If I am confused or want to know more I can ask, I can make decent notes and do more first hand rather than just listen.

Despite this there were some positive comments about the lecture system, albeit with certain caveats attached. A significant proportion of students (20%) made the point that the lecture-tutorial system was good but qualified this by saying only if it was effectively used and the teaching was effective. As an example one student commented:

I do enjoy lectures generally especially when handouts are given to help note taking as sometimes I find it hard to take detailed notes and keep up with the lecture. Lectures can be very interesting if the lecturers try and engage the students and putting the slides on Blackboard before the lecture. This is a must I wish all lecturers did it. However I still prefer seminars overall I find it much easier to build a relationship with the teachers and ask questions. It can all depend on the person taking the seminar though as some lecturers can be quite abrasive and assume the students know everything already which of course is quite ridiculous.

There are comments here that relate to the variability in approaches taken by academics, although in this case the issue is largely based around the provision of class notes and slides that students can download before the lecture. This clearly helps somewhat in the note taking problem. Interestingly here even though the student comes off the fence and states a preference for seminars they make the point that teaching style can make a difference.

Despite the preference for seminars students were prepared to support the lecture system. Students' positive comments about lectures revolved around how short they were and the fact that they were useful for obtaining information. It was evident that students were well aware of what constituted good teaching and were prepared to say so.

I believe both systems can work side by side if the lecturers are good enough at them. One downside is that due to the quality of most of the lecturers I have had I have doubts about whether either system would work completely. Tutors like ***** and ***** are excellent at lectures and seminars however sadly they are in a minority at this.

Some students stated an outright preference for traditional lectures but even here there was a tacit acknowledgement that the seminars were probably better for most students and again the issue of teaching was always in the background:

The lecture or seminar are both useful but depend upon the structure and quality of teaching. Although personally I prefer lectures I believe seminars are better for everyone.

The negative responses for teaching and learning in seminars were largely related to structural issues, in particular the use of straight lecturing or "chalk and talk". This caused boredom and a lack of interest, especially in the context of a 2 hour session. In effect the opportunity for student engagement is not being taken. When the seminar system was first introduced there were certainly some problems with some staff who found it a challenge to change out of their normal teaching approach. One student seemed to have hit on a solution:

Better to vary as some tutors are better than others at interacting with students in seminars so lecturers are better for lectures as you can get bored easily if the tutor doesn't engage you. It is easy to switch off in lectures.

Structure and organisation

Deciding whether a theme was a teaching and learning issue or a structural organisational one was sometimes difficult. For example the top negative issue for seminars was the length of time that a seminar runs, i.e. 2 hours. There may be some argument that this could be a teaching and learning issue, but it is more likely to be linked to the second negative issue. This again mentions the length of time of a seminar but qualifies it by suggesting that it is too long if there is no break and similarly the third negative issue even though it is classified under teaching and learning, is related to the impact that a certain type of teaching can have on the outcome of a seminar.

A number of students commented on the way in which the lectures and tutorials worked, or in fact did not work together. From personal observations and conversations with students a number of specific problems were revealed and these came out in the survey. Students were highly cognisant of how the system should work, that is lecture for information and tutorial for interactive discourse and deconstruction. Problems identified were periods between lecture and tutorial, size of tutorials and the fact that often the tutorial simply repeated what was said in the lecture or even worse was not related to the lecture. One student summed it up:

My feelings are that everything is covered again in tutorials that were covered in lectures therefore I believe lectures are not as important as seminars. Lecturers go into more detail in seminars

The next two categories could on the face of it have been amalgamated but they were kept separate because in the disruptive/noisy category students had been specific in stating the problem whereas in the "too many students" category a simple statement had been made about the number of students in a lecture. Despite this it is a concerning aspect of the modern lecture environment in certain institutions that many students find it a disruptive and distracting environment. The problem is aptly articulated by a part-time student:

As a part time student I have found the lecture mixed with the full time students to be quite frustrating the lectures are quite noisy and some students quite clearly don't want to be there. As I am paying for the course and doing this in my own time as well as doing a full time job I don't really want to be in a lecture with people who don't want to learn, are just there to chat. As our tutorials can be every other week it can mean that the subject was finished so the subject is not fresh in your mind.

There is a comment here about the problems of the lecture-tutorial system, in this case where there is only a tutorial every other week and thus resulting in a disconnect between what are theoretically integrated learning episodes. This particular example is indicative of a growing resource imperative that in the current financial crisis increasingly bears witness to a reduction in contact hours or removal of tutorials altogether.

The benefits in terms of the convenience of seminars were noted by a number of students. In some cases this was done in the context of presenting the problems of the timetable based on the lecture-tutorial:

It means I don't have to come to university so often, like when it's a lecture on one day then a tutorial on a different day I have to come in twice. With a seminar it's all on one day and its over with.

On the same subject another student is a little more honest and open about how they view the lecture-tutorial system:

Having a 2 hour seminar rather than an hour lecture makes it more worthwhile coming into the university. If you have just one hour in one day it is easy to think that you cant be bothered as you are only missing one hour rather than two. Tutorials are easy to miss as you have already covered the information in the lecture. Often tutorial are not placed at a good time they do not allow time for going over notes from lecture before tutorial.

Overall there was a strong preference for the seminar system and when students were asked to choose from one of three options, either seminars alone, lecture-tutorials alone or a combination of both the response was 76%, 4%, 20% respectively.

Summary

The results provided here cover a wide variety of retention related issues and have served to address the two key objectives set at the outset of the thesis. The descriptive results and systemic data present the overall picture of the nature of the business programmes, and the incidence of retention over the seven years. Results for individual student behaviour in terms of retention have provided both supportive evidence of previous research, but also revealed some new insights. The next section provides a conclusive comment on the results and identifies further research.

7.0 CONCLUSION AND RECOMMENDATIONS

The retention of students in HE institutions is a globally recognised problem, but despite decades of research and resource allocation, there remains sparse evidence of any improvements in bottom line retention. A potential contributory factor is the lack of research by practitioners and this thesis attempted to fill this gap. Two general objectives were identified, firstly to identify why so many students failed to progress to year two of the business programmes, and subsequently to investigate the possibility of improving year-one to year-two retention.

Both of these objectives have met with success. A detailed analysis of individual student non-progression has been compiled, the main finding identifying a distinct difference in students who leave early and those who stay and fail. The main solution lay in adapting the institution in the form of changing the teaching delivery environment. This improved retention by around 6-7 percentage points, but significantly had little impact on voluntary withdrawal before the end of the first year. Voluntary withdrawal was identified as more of a function of student entering attitudes and motivation and as such requires a complex combination of solutions. Before these findings are summarised in more detail there follows a brief recounting of each chapter.

The first chapter presented a picture of a fast changing HE environment typified by an increase in the general level of participation and a resultant change in the make-up of the student cohort. The increasing numbers of NT students had an unwelcome side effect in that these students were more likely to fail to complete their courses. The emergence of this phenomenon was met with strenuous efforts to define and measure retention as a basis for understanding, and the first year of college was identified as crucial. The chapter concludes with a report on the general failure of the industry on a global level to effectively address low retention. This failure is evident despite a significant volume of research on both why students failed and on potential solutions.

This research was presented in the second chapter and stretched back to the 20's in the US but on a global scale indicated common characteristics likely to lead to student dropout. When students were asked why they left, a similar consistent story emerged. The development of explanatory models and theories suggested a highly complex phenomenon where several circumstances and reasons could contribute to students not completing. The concept of institutional responsibility emerged proposing the notion that students were unsuccessful not because of personal characteristics or circumstances, but rather because the institutional environment was unsuitable.

The third chapter engaged with the growing literature on retention solutions and generated a model of solution types related to the student cycle from pre-application to classes starting. Two key types of solution were identified: bolt-on solutions and institutional change, but a third category was introduced. This was based around the idea of processes that support and enable retention solutions and included key activities such as data collection and early warning. This provided for an operational focus, a perspective that has been largely missing from retention research.

The fourth chapter presented a critique of existing retention research and suggested that there were reliability problems in research on why students do not complete and also that solution research was plagued by a lack of effective evaluative research. These methodological problems are exacerbated by the lack of long term, deep engagement with retention issues by researchers. The chapter summarises by arguing for more practitioner based research and more long term engagement with the retention problem.

The response to this was presented in chapter 5 where after a general overview of the quantitative-qualitative debate was presented, and the predominance of positivist research in retention was outlined, the methodology for this thesis was developed. The approach taken in this thesis was intentionally directed at filling some of the methodology gaps outlined in chapter 4 and deployed a case study strategy. This provided an enclosed system and within this strategy an action research methodology was used. A diverse set of methods was employed to collect data over the seven years of the study and the results are presented in chapter 5.

Because of the longitudinal nature of the thesis, and its action research emphasis the conclusions begin with some vital emerging activities that were instrumental in

facilitating the subsequent analysis. Subsequently findings from the investigation of why students do not progress will be presented followed by an interpretation and presentation of the findings from evaluation of a "bolt-on" solution (academic skills), and finally a discussion of the impact of changing the institution in the form of the teaching delivery system. The findings will be presented in the context of the literature identifying where there is consistency, but also drawing out where new insights and understandings have emerged. Potential for further areas of research are provided and recommendations made with practical implications for both the industry and the UoH.

7.1 The importance of data, early intervention, and interaction

Working the retention problem from the bottom up in a sense is emulating the prescribed strategic and comprehensive solutions to retention (Tinto 1993: 138-204), and in particular the need for coordinated or "joined-up" approaches (Blythman and Orr 2002). Effective data; student focus; faculty-student interaction; student centred teaching and early intervention, are a limited list of some of the components of such an approach, and these were all present on a localised level. Thus the need for 'joined up' thinking and action by various institution bodies was in effect removed, and in essence the problems identified in chapter 4 related to implementation issues have been sidestepped. As an example, the attendance monitoring system was initiated at the local level and entirely managed by front-line academics. This as a result avoided all the accuracy, cultural and organisational problems often levelled at university attendance systems (Buglear 2009).

The accurate longitudinal data enabled effective and reliable programme evaluation and provided accurate data on many aspects of retention including student nonprogression. Attendance data supported an early intervention policy that was deployed in both a timely and in a sensitive manner, and this in turn generated more in depth qualitative data on student behaviour. The early intervention policy is overtly evident in the profile of when students leave (figure 5) and this indicated that students do not withdraw in blocks at the end of terms. This thesis clearly indicated that the withdrawal process was linear, starting high and tailing off gradually and presenting a more realistic story of withdrawal timing. Early intervention is also beneficial to students who do leave because it allowed counselling to take place thus helping students become comfortable with their decision, and additionally provided positive publicity for the course.

Perhaps one of the most important, and most intangible issues identified in the literature is the idea of student-staff interaction (Astin 1975; Bean 1980; Iffert 1958; Panos and Astin 1968; Pascarella and Terenzini 1977; Terenzini and Pascarella 1980). From a very early stage the policy of engaging students at an informal level was uppermost amongst the aims of the first year team. As a year tutor, knowing the name, background, and general characteristics of each student was central to the subsequent nature of the relationship between the student and the institution. This open approach where it was stressed that we as academics would be accessible at any time for students was reciprocated in students' willingness to approach us with problems. A student 'dropping in' for a chat was a common occurrence and enabled the collection of some rich qualitative data, but also served the purpose of enabling faculty-student interaction.

7.2 Objective 1: Why do some students fail to progress?

The first objective was to identify the nature of non-progression and this involved the development of an accurate database that could collect relevant retention related data. Data was collected on both systemic retention and also on individual student retention related behaviour.

Structural impacts on retention

The demographic make-up of the cohort clearly shows that this is a recruiting type of course, and the characteristics of the students indicate that they can be largely classified as NT. Variations in the cohort in terms of gender, ethnicity, age and so on will potentially impact on retention because of the clear relationship between these variables and likelihood of progressing. The two years where this may have been evident was in 2004 and 2008. Despite the seminar system being in operation in both of these years progression was low, but structural reasons accounted for this. Thus even at course levels there can be significant structural effects that can account for

changes in retention, thus potentially hiding any effects of retention programmes and experiments. What this indicates is that it is often difficult to manage retention and many issues are out of the control of the institution especially after classes start.

Systemic performance and student failure to progress

At a systemic level a key finding was the identification of two types of nonprogression student, those that withdrew before the end of the academic year, essentially students who disengaged from the system, and those who remained enrolled but failed to progress. This distinction has been identified in the literature (Baumgart and Johnstone 1977) and is the key to understanding potential solutions. Of particular concern are the students that are classed as fail non-complete. This group of students has been accurately identified in this thesis as a result of the close monitoring and live tracking approaches taken. Due to the inaccuracy of many university recording systems, this type of student is often included in the fail category, but these students are not academic fails, they are highly likely to be students with problems who are simply not identified because of inadequate early warning systems.

Most of the background variables indicative of dropout strongly mirror the findings of most the research with entry qualifications and gender showing strong influences on progression. Females have significantly higher persistence levels and evidence indicates here that it is a phenomenon that seems to be consistent across ethic groups. What is of particular interest, and concern, is the poor performance of the UK Asian group of students. This is evident for both genders with Asian females achieving lower progression rates than all other females, and Asian males, and Black male students are the lowest performers of all groups.

One of the strongest indicators of retention in this thesis was the entry method of students. Students who gain entry onto the first year by any other method than the traditional UCAS system are likely to exhibit NT characteristics, but more importantly it is likely that they will not have prepared themselves for HE. There is ample evidence of the effect of lack of preparation and low motivation on retention (Bean 1982; Eaton and Bean 1995; Lowe and Cook 2003; Mackie 2001; Ozga and Sukhnandan 1998) and some evidence that late enrolment can lead to poor retention, but there is very little on the impact of method of entry. Students who apply outside of

the UCAS system or who are repeating the year have very low progression rates (less than 50% chance). Similarly students who transfer from other courses within the institution are also at high risk and these students will tend to display NT characteristics, and will normally live locally. For these students course changes are indicative of indecision or poor decision making processes, possibly combined with inaccurate university advertising that led them to choosing their first course. Of course recruiting universities often have little choice but to boost recruitment by taking just this sort of student. Repeat students are a direct result of poor retention, and have a similar low likelihood of being retained so in effect there is a vicious circle of poor retention leading to high numbers of repeating students, and this continues until as shown in this thesis, the cycle is broken (Blanc et al. 1983).

Individual student behaviour

The combination of detailed data, early intervention, engagement with students and long term observation of student behaviour has allowed for the compilation of accurate student behaviour profiles. Each individual case was unique but three general categories were identified based on the timing of withdrawal, early leavers, late leavers and circumstantial leavers. The key issue clearly identified in this thesis was that despite the actual timing of withdrawal, most students that eventually failed to progress will have had problems from an early stage, including students who did not withdraw but failed academically or did not complete. Early leavers and circumstantial leavers generally were not problematic in so much as the reasons were relatively straightforward, though unique and complex, and they tended to be receptive of offers of support and advice.

A significant proportion of students though actively engaged in avoidance behaviour when they were having problems. This was most evident in students that were late leavers and those students that were failed without completing. Without early intervention and efforts to engage students from the outset the incidence of avoidance behaviour would have been far worse than it was, and this can go someway to explaining why 50% of students in exit surveys who do not progress fail to give a reason for their leaving. It also in a sense explains other phenomena such as why some students resist offers of support and help and once again cultural capital or the lack of relevant cultural capital goes someway in explaining this. Of course some students displayed avoidance behaviour for other potential reasons, for example traditional well qualified students who find themselves bored or have made the wrong choice but have the pressure from parents and peers to remain (Bank et al. 1990).

On an individual basis clearly each student that had problems would present a unique combination of issues that would contribute to that problem. In some cases this was relatively clear cut, for example students that were homesick or had a specific event occur such as bereavement. In many cases though the root cause of the problem was difficult to identify and this in conjunction with the avoidance behaviour produced a response whereby the student provided what they saw, and McKeown et al (1993: 81) defined as "appropriate" reasons. One thing is clear and that is that students do not leave because of poor teaching or because of problems related to operational activities within the institution. None of the student logs contained any reference to this issue, nor was it mentioned in conversation. A small minority of students cited problems with the university atmosphere but this was exclusively students who were questioned after they left and were contacted by telephone.

7.3 Objective 2: Solutions to poor retention

The second objective of the thesis was to identify potential solutions and where possible to implement said solutions with the ultimate aim of improving year-one to year-two progression. Two key retention approaches were assessed, the classic bolt-on solution in the form of academic skills support and change in the institution in the form of teaching delivery.

You can lead a horse to water but you can't make it drink: the problem of bolton solutions.

The evidence here confirms the problem of self-selection in terms of uptake of open access resources and bolt-on programmes. In this case ASS was the open access resource, but it is representative of similarly structured programmes such as counselling, or peer-mentoring. It is clear that it is students who would normally be considered at risk of not progressing, that are least likely to access any available support resources. Across some categories the difference is striking, for example only 17.3% of males used the service compared to 42% of females. Across others it is not

only striking but linear, for example UCAS entry points where only 16.4% of students entering with up to 160 points use the service as opposed to 51.7% of students entering with over 360 points. A particularly concerning issue is the negligible use made by two groups with the highest risk of not progressing, late applicants and repeat students with only 1(3%) student out of 38 using ASS for the Business Operations assignment, and only a further 2(5%) visited thereafter during the academic year.

In terms of evaluation two issues were addressed. Firstly there was the impact that using skills support can have on immediate academic performance, in this case an assignment in the operations module. It is clear that even when variables such as gender and UCAS entry points are controlled for, ASS has a clear impact on student performance with an increase in the proportion of students that obtain A grades across all variables. The second evaluative issue was the relationship between use of ASS and retention. Chapter 4 has indicated that it is very difficult to evaluate bolt-on programmes in terms of impact on retention and this is strongly supported here. Detailed data has indicated that it is likely that although use of ASS is associated with increased likelihood of progression, it is also likely that background variables account for part of this success because it is students who possess cultural capital that are likely to avail themselves of support. There were NT students, and students with lower UCAS entry points that did make use of the service and this group were retained almost at the same level as other users. This exposed the notion that one of the differences between successful and unsuccessful NT students may be motivation and intention, a key factor identified by several authors (Allen 1999; Metzner and Bean 1987; Smith.J.S. 2004).

Changing the institution

Bolt-on solutions to retention are problematic on several levels, they fail to reach those students in need, are difficult to implement and challenging to evaluate. Despite this, the vast majority of retention programmes are of this type. The literature indicated that an alternative approach to improving retention may lay with fundamental changes to the institution, and the consensus was that this change needed to focus on classrooms where most student engagement occurs (Tinto 1993; 1997; 2000). There is little evidence of the impact of making changes to the institution, most

of the work in this area is either theoretical, or it is comparative at the institutional level where problems of different structures again cause reliability issues. This thesis has provided for the first time a clear evaluation of the effects on retention of changing the institution, and focussed on the key aspect of the teaching and learning environment.

Changing from the classic lecture tutorial system to smaller seminar groups had several beneficial effects and support the findings of Drane (2005) and are reflective generally of the benefits arising from smaller learning groups suggested by several retention authors (Braxton et al. 2000; Cartney and Rouse 2006; Glogowska et al. 2007). Interaction levels, contact with faculty, and peer interaction concepts are all evident in the results of switching to a seminar system and strongly resonate with the integrative and engagement benefits of learning communities suggested by Boudreau and Kromrey (1994). It is clear that this change had the effect of adjusting the habitus of the first year business degree and as a result enhanced the cultural capital of NT students because this mode of learning is something all students would be familiar with from school. Furthermore it enabled tutors to become more involved in student learning, and enhanced the process of identifying students who were struggling at an early stage.

A beneficial side-effect of switching out of the classic lecture-tutorial system into smaller seminars was an improvement in timetable scheduling. Essentially the system became student centred and enabled students to be provided with a schedule that was built around their own personal circumstances and needs. Furthermore the built-in flexibility of the seminar system enabled any personal timetable to change if the student's circumstances changed during the term. This in turn encouraged attendance at class which in turn enhanced levels of student engagement with each other and vitally with academic staff.

Interestingly the improvement in retention between the lecture system and seminar system is almost completely accounted for by the increase in academic success, thus confirming the lack of impact the institutional change can have on student withdrawal. Changing the institution in terms of the teaching delivery system will only address the retention issues of students who are motivated to persist, that is that

do not voluntarily withdraw. Because academic failures are in reality only a small proportion of total non-progression, then the prospect for major improvements in retention through changes in teaching delivery are potentially limited.

7.4 Practical implications and recommendations

This thesis has indicated what can be achieved in dealing with retention issues by using a bottom up locally managed approach to retention. As such the departure point for recommendations begins with the urgent need to move away from institutional wide initiatives. This thesis has indicated that this approach has been less than effective at improving retention and what is required is a more local focus that can circumvent the organisational and cultural impediments that often stifle retention strategy. Other recommendations revolve around changes to the institution mainly in the form of teaching. The implications of the findings are wide ranging and have relevance for the UoH and also the industry as a whole.

7.4.1 A local focus

Empower and motivate front-line academics

McGrath and Braunstein (1997) argued for a more local focus to retention research because of the variability of the effects of similar approaches across institutions. They mention administrators and faculty but there is no escaping the fact that the key agent within the university in terms of interaction and contact with students is the academic with the responsibility for looking after year-1 students. It is important to note though that year tutors are academics and for the large part those academics focus on the research of their specific academic discipline. Year tutoring is an onerous task and often a temporary rotating position and generally speaking academics in this position will have precious little time to allocate to what is traditionally a very high maintenance group of students. Understandably the tutor's mind is on a quick exit to enable them to get on with the business of research and administration, the two routes to promotion within the new university environment.

Despite this it is important that institutions recognise the position of the Year Tutor and begin a process of empowering and motivating these academics. The first step is to create incentives that encourage academics to focus on retention issues, so for example this would include provision in workload for year tutoring and performance appraisals based on retention and student satisfaction. Furthermore it is vital that professional progression within the institution is linked to retention activities and performance rather than just research, administration and teaching. It would also be necessary to initiate a training system for front-line academics which would focus on issues such as early intervention, how to approach and deal with students, and understanding disengagement.

Currently there are retention specialists residing in many institutions but they tend to be based centrally and often they have little power. What is needed is retention specialists who are also practitioners, that is they teach. This implies not only empowering current front-line academics but also recruiting academics directly into administrative positions such as year tutorship.

Focus data collection and EWI locally

In line with the above recommendations for changes to academic retention functions, it is necessary to ensure that academics at the coal-face are provided with the necessary tools. The collection of data needs to be focussed on low level units, i.e. specific cohorts (usually identified as the unit of responsibility for the year tutor) and the members of the cohort need to be defined and set. Additionally this defined group needs to be consistently observed and measured over a period of time (Mortenson 2005). This thesis has indicated that the measurement and management of retention data at a local level will help avoid some of the methodological problems associated with the evaluation of retention.

It is also vital that an effective attendance monitoring system is used that is based on accountability and responsibility. The evidence here indicates that attendance monitoring is the most reliable early indicator that a student is having problems. It is insufficient to simply have a system though, it also needs to be structured so that the front-line academic has immediate access to simple information, and that the responsibility for intervening with students rests with that academic.

Recruitment

Many students who come to university are clearly ill-prepared for the rigours of academic study and all it implies. Students who enter through means other than the traditional UCAS system, and by definition are recruited at the front-line are often typified by this lack of preparedness. Rather than using a revolving door approach to achieve targets, these potential students should be intensely counselled as to the correct course of action. This may well mean accepting a lower target but it is more effective in the long run to recruit 100 and keep 90 than to recruit 120 and keep 95. This approach also benefits the student and often stops them from making a rash decision that both they and the institution may regret. This approach to recruitment covers not only front-line recruitment that occurs in recruiting courses, but also the recruiting process carried out by all institutions. Even students who enter through the traditional UCAS system do so with doubt, mainly as a result of expectation of schools, peers and parents. Often these students are at risk of not progressing, but more significantly have to deal with the consequences of their failure in the context of the original pressure to attend.

7.4.2 Structural and process recommendations

The key structural change identified here was the switch from the lecture-tutorial system to smaller teaching groups based around seminars. The classroom is central to any student experience and so it remains an imperative that institutions focus on enhancing this experience by fundamentally changing the habitus (Thomas 2002). Identifying where smaller teaching groups can replace the mass system of lectures is key to this change although it is acknowledged that existing structures may cause problems.

In the case of the business programmes at UoH there were some distinct starting conditions that certainly aided in the change process. Firstly the number of students involved meant that the change did not require any additional resources. With 100 students each module required 8 teaching hours (1 for the lecture and 7 for tutorials assuming around 12-15 students per tutorial) and similarly the 4x2 seminars (25 student per seminar) also required 8 teaching hours. Clearly if course numbers are

greater than 100-120 then there may be additional resourcing implications. The lecture system becomes more attractive from an economic perspective as the size of a course increases, but taking this approach may be short-sighted given the benefits of smaller group teaching clearly indicated here.

Secondly, all of the modules for the business programmes were delivered internally by the Department of Business Studies. Often large programmes are commonly typified by service teaching; that is some of the modules on the course may be delivered by another department, or even another school. This would make changes challenging because of the consideration that would need to be given to cross school timetables. Still it remains important that where there is control over a module that every effort should be made to re-structure the delivery system away from the lecturetutorial approach. Even if this is only possible in fraction of the modules on a course, converting those modules can give benefits for the whole course through better tracking of students and improvements in student engagement generally.

In terms of bolt-on retention programmes, it is important that institutions move to the next level in terms of support provision. This final step involves the integration of support into everyday activities, preferably into the curriculum, a move suggested by several authors. (Congos and Schoeps 1998; Jacklin and Le Riche 2009; Tatum and Rasool 1996). It is only by moving to this model that all students would receive the benefits of the support and not just those with the cultural capital.

7.4.3 Further research

Despite the long history of research in retention, there still remains a significant amount of work to do. This thesis has gone some way toward filling some gaps in knowledge, specifically it has provided robust evidence of the impact of changing the institution on retention, and also it has highlighted the problems of the bolt-on programme in terms of evaluating its effect on retention. Furthermore it has exposed some important notions about how students behave, in particular the nature of avoidance behaviour, and the true pattern of student non-progression. Additionally it has shown that students generally do not leave because of problems with the institution, but rather as a result of a complex mix of circumstances and individual student characteristics and motivations.

There is a clear problem in terms of the performance of some ethnic groups, particularly the domestic Asian group. It is important that further research be undertaken in order to investigate the ethnic dimension to retention in the UK, and for institutions like UoH that take a significant proportion of Asian students this is particularly important. Similarly, given the increase in Eastern EU students it may be prudent to investigate the experience of these students to identify the reasons for their good performance and high retention rates.

Perhaps of most importance is the need for more robust and reliable evaluative studies of retention programmes. Institutions invest significant resources into retention efforts, but rarely is this investment based on any clear or robust evaluation. This thesis has indicated what can be achieved in terms of evaluation but there is an urgent need for the industry to take retention more seriously and commit resources to a more intense evaluation of its retention programmes. This implies longer term commitment in time and resources but this can be offset in the longer term by the improved retention of students.

7.5 Post-script and reflection

Postscript: HE context: the future

During the writing of this thesis there have been major upheavals both in the economy and as a result of this in HE itself. These changes are bound to have a profound effect on all aspects of the HE industry and as such there may be potential impact on the shape of student retention and completion. What we do not know but can only guess at is how the change in the financing of HE will impact on the make-up of the student cohort. It may well be that students will think more carefully about HE and not just "give it a go". Therefore students may be more motivated to stay because of the cost implications of not doing so. (This depends on whether students have to pay the whole fee at the start or, if like now they can "test-run" for the first 10 weeks without incurring any costs). Tied in with issue is the potential impact on the composition of the student cohort. NT students normally have particular background and circumstantial characteristics that may make them somewhat more financially risk averse than their traditional counterparts. If we assume that fewer NT students will attend university and traditional students continue to attend at the same, or a higher rate, then we might also assume that systemic retention will improve. The rationale for this assumption is based on the overwhelming evidence that traditional students are more likely to be retained than their NT counterparts.

Personal reflection

Throughout my tenure as Year Tutor I have operated on a strict hierarchy of priorities structured and ordered thusly; 1 Family; 2 Students; 3 Colleagues; 4 Institution. This has caused a significant amount of personal frustration and stress because placing students as primary focus has inevitably meant at times conflict with the overriding structures and regulations of the institution, and in some cases with colleagues. As a year tutor you are naturally the first point of contact with students (theoretically, although this depends on how you approach the job). If students have complaints, especially for example about teaching, then it is the year tutor that is placed in the impossible position of having to respond on behalf of the students. Having created a strong bond with the cohort from the start, those students tend to expect that there will be a response to their complaints and it is this conflict that I have personally found to be frustrating and stressful. Despite the inevitable conflict inherent in putting students before colleagues and institution I feel my approach has been vindicated, both in terms of the in-depth understanding of student non-completion behaviour, and the significant improvements in student retention. Additionally the format for the structure of the first year on business studies has been emulated in part by many other courses in the business school, as modules have gradually been converted away from lectures to smaller class seminars.

Sadly I see little prospect of any improvements in student retention given the current operating climates in UK HE institutions. The main problem exposed by this thesis is the lack of local focus in retention efforts. Whilst the current structure remains, and those who have a potentially direct impact on student retention are not motivated and

supported to focus on retention, then there will be no improvement. In a previous life I worked as a change project manager for the textile industry, during a period in the 1980's and 90's that was typified by significant changes. Change was painful and fiercely resisted by many but eventually the industry recognised and succumbed to the inevitable. If I were to compare the environment in HE with that of textiles (a tradionally organised and cultural environment) then I fear for the industry, especially in the current radically changing environment.

Postscript

My tenure as year one tutor for the business programmes came to an abrupt end when I was transferred to another department. From a personal perspective I will miss the level of interaction I had with students, but on another level it is somewhat of a relief. Some of the things I won't miss are: the lack of recognition for turning Business Studies into one of the best performing courses on retention in the University, the confrontation with colleagues, the continual failure of processes and systems, and the frustration and subsequent high blood pressure of being in a position of responsibility but having little authority to make unilateral decisions for the benefit of students. Finally I will not miss the continual procession of students at my door and the hundreds of e-mails.

This has been at times a lonely journey with a constant effort to encourage colleagues and the institution to take this issue seriously. I think that Edward Anderson (1976) eloquently captured the problem of retention related research and the situation of individuals who endeavour to improve the lot of students:

"It starts with a person. A person who indivually says "I care". He starts marching to a different drummer, he begins by humming, he begins singing inside and outside, a song of caring. And he determines he will not live his life as the Asian Philosopher poet who wrote, "Spring is gone, summer is past and winter is here, and the song I was meant to sing, is still unsung, for I have spent my days stringing, unstringing and restringing my instrument"" (p 699)

The message is clear, we perhaps have enough understanding of retention, it is time to do something about it.

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APPENDICES

APPENDIX I

ATTENDANCE PROPOSAL AND GUIDE

The following process guide is intended as a support to those lecturers involved in teaching on year 1 BABS.

Registers in tutorials

It is vital that real time attendance figures are collected for students. The reasons for this are related to the early intervention for attendance related problems. Therefore tutors are asked to follow a process.

Individual tutors will receive a copy of each of their tutorial lists in the form of Excel spreadsheets from the year tutor before the start of term.

Tutors should keep this copy on their PC.

Each week the tutor should take a register, and then transfer attendance information to the spreadsheet

Tutors should then e-mail the updated registers to the year tutor each week.

There is an example of a completed tutorial register below. It is vital that tutors use a standard identification convention when completing the register. Please use the following symbols on the register

X=Student attended C=Tutorial cancelled N=No Tutorial planned O= Student absent T=Transfer out I= Transfer in W=Withdrawn from course

Module na	ime:			Мо	dule	coc	le														Nu	mbe	r of	tuto	rials			22
TUTOR				Tut	orial	tim	e:				Da	y:				Loc	catio	n										Average
Surname	First name	Number	Pathway	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	`9	20	21	22	23	24	attendance
				х	Х	0	х	0	0	W				С					n									13.64%
				х	х	0	х	х	0	0	х	х	х	с	0	х	х	х	n	х	х	х	х	х	х	х	х	81.82%
				х	х	х	х	х	х	х	х	х	х	С	0	х	х	х	n	х	х	х	х	х	х	х	0	90.91%
				х	х	х	х	х	х	х	х	х	х	с	х	х	0	х	n	х	х	х	х	х	х	х	х	95.45%
				х	х	х	0	0	0	0	0	х	0	с	0	0	0	х	n	х	х	х	0	0	0	х	х	45.45%
				х	х	х	х	х	х	0	х	х	х	с	х	х	х	х	n	х	х	х	х	х	х	х	0	90.91%
				х	х	х	х	х	х	х	х	х	х	с	0	х	х	х	n	х	х	х	х	х	х	х	0	90.91%
				х	х	х	х	х	0	0	х	х	х	с	х	х	х	х	n	х	х	х	х	х	х	х	х	90.91%
				х	х	х	х	х	х	х	х	х	х	с	0	х	0	х	n	х	х	0	0	х	х	х	х	81.82%
				х	х	х	0	х	х	0	х	х	х	с	х	х	х	х	n	0	0	0	х	х	х	х	х	77.27%
				х	х	х	х	х	х	х	х	х	х	с	х	Т												50.00%
				х	х	х	х	х	х	х	х	х	х	с	х	х	х	х	n	0	х	х	х	х	х	х	х	95.45%
				х	х	х	0	х	0	х	х	х	0	с	0	х	х	0	n	0	х	х	х	0	0	0	х	59.09%
				х	х	х	х	х	х	х	0	х	х	с	х	х	х	х	n	х	х	0	х	х	х	х	0	86.36%
												Ι	х	с	0	х	х	х	n	х	х	х	х	х	х	х	0	50.00%
				х	х	х	х	х	х	х	х	х	х	с	х	х	х	х	n	х	х	0	х	х	о	х	0	86.36%
				х	х	х	х	х	х	х	х	х	х	с	0	х	х	х	n		х	х	х	х	х	х	х	90.91%

The year tutor can then feed the returns into the system and automatically identify any attendance problems. Problems can be dealt with early, and the appropriate help provided to the students by the year tutor and subject tutor working together.

Avoid changing tutorial times

One of the main efforts in terms of scheduling of tutorials has been to try to take into consideration the particular circumstances of students. This means providing "made to measure" schedules for individual students. This effort is made pointless if subsequently times of tutorials are changed for supply side side reasons, i.e. by tutors/lecturers.

Tutor access to e-mail

It is vital that all tutors involved in the delivery of modules for year I BABS have acces to e-mail, whether internally or externally. In some cases this will be external, especially with part-time lecturers, but it is vital that the year tutor is informed of the e-mail address.

Developing skills, and extra tuition

Whilst attendance has been shown to be a strong indicator of performance, the system can also be used to provide additional academic skills help where appropriate. To aid in this performance data can be input and also used to quickly identify which students may need help. It is important that tutors feed performance data back to the year tutor as soon as possible.

Teaching week 1 tutorials

In the past, because of the shortcomings in timetable scheduling, some tutorials fell before the lecture. In teaching week 1 this caused problems because obviously no work had been done. The culture has developed where some subjects have chosen to cancel first tutorials, and this culture has been noted to filter through to students who now often take it for granted that there are no tutorials in the first week. It is vital that all tutorials take place in teaching week 1. Some suggestions for activities would be:

- Familiarisation with tutor and location
- Reinforcing of attendance policy
- Background to subject
- Assessment policy
- Resit policy, what happens if you miss
- Distribution of any course handbooks/materials

We are aware that many modules deal with this type of information in lecture 1, but it makes sense that we use the time available in the first tutorial to do this. The benefits are that students will more readily internalise this vital information because it is being adminstered in a more intimate setting and tutors can ensure that students have received and understood information. I accept that in some cases modules have their own organisational issues related to these problematic first tutorials and do run first tutorials. In this case we have no wish to interfere with a system that works.

APPENDIX II

Variable list.

Variable name	Variable source	UoH file	Business studies file				
STARTYEAR	UoH raw data	YES	YES (2002-2008)				
ACSHOOL	UoH raw data	YES					
STARTMONTH	UoH raw data	YES					
MODEATT	UoH raw data	YES					
STUGENDER	UoH raw data	YES	YES				
STUAGE	UoH raw data	YES	YES				
ETHNICITY	UoH raw data	YES	YES				
STUTARIFF	UoH raw data	YES	YES				
WITHDRESN	UoH raw data	YES	YES				
WITHDRDTE	UoH raw data	YES	YES				
STURESULT	UoH raw data	YES	YES				
STUNEW	Derived	YES					
CENTRE	Derived	YES					
FEETYPE	Derived	YES	YES				
ACCOM	Derived	YES	YES				
HESAINCLUDE	Derived	YES	YES				
YOUNGMAT	Derived	YES	YES				
ENTMETH	Primary data		YES				
SEMLEC	Derived		YES				
PROGRAM	Student records		YES				
PROGTYPE	Derived		YES				
**ATT	Primary data		YES				
**PERF1	Student records		YES				
**PERF2	Student records		YES				
**AVMARK	Student records		YES				
**GRADE	Derived		YES				
TOTATT	Primary data		YES				
TOTAVMARK	Student records		YES				
TOTGRADE	Derived		YES				
WITHDRTYPE	Primary data		YES				
NUMCONTACTS	Primary data		YES				
NUMDISCUSS	Primary data		YES				
RESISTANT	Primary data		YES				
OPSVISTSKILL	Primary data		YES				
FIRSTOPMARK	Primary data		YES				
TOTSKILLVISIT	ASS office data		YES				
TOTTIMESKILL	ASS office data		YES				

** This variable is repeated 4 times-once for each core module.