NON-COMPLETION IN INSTITUTES OF TECHNOLOGY: AN INVESTIGATION OF PREPARATION, ATTITUDES AND BEHAVIOURS AMONG FIRST YEAR STUDENTS

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EXECUTIVE SUMMARY

The first phase of the IT non-completion study showed that of the 11,175 students who embarked on their courses in 1995, just over two-fifths (42.61%) did not complete these courses. This study also showed that a greater percentage of males (46.8%) than of females (36.9%) did not manage to complete their courses. There were major differences between fields of study. The highest completion rates were in Humanities, in which two-thirds of students completed their studies, and in Business Studies, in which nearly three-fifths graduated on time. In contrast, there were relatively lower rates of completion in Engineering and Computing, with half of the students not completing their courses. Of the students who did not progress from first to second year (over one-third who had entered the ITs in 1995), the vast majority had either failed their examinations and then withdrawn, or they withdrew before sitting first year examinations.

The aim of Phase 2 of the study was to identify the possible causes of noncompletion focusing especially on students' first year experiences. Six courses of study at National Certificate level were selected for investigation: Business Studies, Computing, Construction Studies, Electronics, Office Information Systems, and Science. Two types of data were collected. First, a student questionnaire was completed by 1,351 students in early 2001. The questionnaire sought reasons for students' choice of college and course, students' expectations of their courses, their experiences of course content, course organisation and classes, sources of financial aid/employment and their level of satisfaction with various features of course and college including support services. Questionnaires were completed during a midweek timetabled lecture under conditions that were designed to guarantee confidentiality. Secondly, semi-structured interviews were carried out with staff teaching these courses in seven ITs. The interviews focused on staff perceptions of students' preparation for college, experiences of teaching courses, staff-student contact, and services and facilities.

Location was the single most important factor in a student's decision to select a particular IT. Over two-thirds said that this factor was important or somewhat important, while only a minority (6%) thought that it was unimportant. The fact that the college offered the best course in the student's chosen discipline was the second most important reason, with nearly three-fifths regarding this as important, and only just over 6% as being unimportant. Being 'interested in the subject' was by far the

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most important reason for selection of particular courses, while teachers', parents' and friends' suggestions were not considered important. The college prospectus was the only source of information on colleges and courses that was consistently regarded as important by students.

Two-thirds of students said that they obtained their first choice of course through the CAO application process. However, only a small percentage indicated that they had a good understanding of their course. Not surprisingly, those who had received career guidance said that they had a better understanding of their course than those who did not get such guidance. Most students had high educational aspirations with nearly three-quarters hoping to obtain a degree and only just over 8% being satisfied with a National Certificate.

Many aspects and experiences of college life were in line with student expectations. However, almost one-third of the students found that the course workload was greater than what they had expected before enrolling. Nearly threequarters were experiencing some difficulty with coursework which in many cases was perceived to be due to the fact that they had not taken certain subjects in secondary school. There was also a general satisfaction with course organisation, although about one-third of students took the view that they had too many scheduled class hours.

More than half of the students had thought of dropping out at some time, while almost one-quarter were still thinking about leaving their course at the time of the survey. The main reason for wanting to leave was the difficulty of the course, often of a particular subject. There were however, major differences between fields of study in this regard. While only one-seventh of Business Studies students who had thought of leaving gave difficulties with subject matter as a reason, more than half of Electronics and Computing students did so.

Overall, there was a reasonable level of satisfaction with the introduction that students had been given to college life. Just over half of the students were satisfied with the availability, enthusiasm and approachability of teaching staff, and while a relatively small percentage (between 10 and 15%) were dissatisfied with staff, a substantial number were neutral in this regard. The majority of students expressed satisfaction with features of their lectures including the number of lectures, size of group, and the quality of the room where the lectures took place. While there was rather less satisfaction with the number of tutorials, students were relatively satisfied with the usefulness of available tutorials. In the case of computer facilities, there was

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markedly less satisfaction especially with regard to access and the number of computers available. There was a high degree of satisfaction with libraries, but a low level with canteen facilities.

Of the various changes suggested by students, the most frequently suggested, in the case of teaching staff, concerned greater approachability, as well as improving lecturing skills and techniques. More than a quarter of students suggested that there was a need for either more tutorials or setting up tutorials in areas where they were not presently available. A large number of students also recommended an increase and improvement in computer facilities. As might be expected given the level of dissatisfaction, the largest number of suggestions concerned canteen facilities.

On the basis of their responses to a question that asked whether or not they had ever considered leaving their course, students were categorised into three groups: (i) those had never considered leaving, (ii) those who no longer thought about leaving, and (iii) those who still thought about leaving and those who actually wanted to leave. Analysis of the factors differentiating between these groups showed that thinking about leaving was associated with having a less satisfactory understanding of the course before entering college, as well as relatively low aspirations. Thinking about leaving the course was also associated with students' perceptions of teaching staff; staff were considered to be less approachable, available and enthusiastic by those who were thinking of leaving.

Many of the issues that emerged in the findings from the student satisfaction survey were mentioned by IT staff in the semi-structured interviews as important factors in predicting drop-out. In particular, lack of student preparedness for college generally, and for the particular courses that they had selected was identified. It was felt that many students undergo considerable stress in the transition from second to third-level education. Learning to study on their own and getting accustomed to a new style of teaching were also mentioned as major problems for some students. Lack of motivation, which tended to manifest itself in poor application to coursework and low attendance at classes was considered a problem among a substantial number of students. Lack of background knowledge in particular subjects in school was not considered a major drawback since courses were pitched at a basic level for the first year. A major issue for staff was students' part-time work, which was perceived to be excessive in many instances, and as having a very negative effect on both attendance at classes and study.

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A number of conclusions and recommendations are presented in the report. These are based on the evidence of the work presented here and take into account changes in the demographic structure of the population and the changing role of Institutes of Technology in higher education. There is a need to consider how concern with maintenance of intake can be balanced with the provision of services that will enhance completion rates. A review of teaching and learning methodologies is recommended taking into account the emphasis on research within the sector.

In devising initiatives to combat drop-out, it has to be recognised that many students withdraw from college for a variety of personal and social reasons, while for others academic failure is the major cause. There is also a need to consider differences between fields of study, as shown in Phase I of this study, in devising appropriate interventions. We take the view that most benefit will be derived from focusing on the experiences of students in their first year, since most problems arise during this time. We recommend that retention efforts should begin even before students arrive in college and that ITs should build stronger links with schools so that potential applicants are better informed. There is also a need for extended orientation programmes. We also recommend a learning support programme be put in place for students who are weak in critical areas as well as a mentoring programme to monitor the problems that individual students may be encountering. A mentoring programme should be linked to a range of services for students identified as being at risk of dropping out. Finally, we recommend more detailed investigation of the pattern and causes of non-completion, which would be enhanced considerably if reasons for departure could be documented in a manner which is consistent across institutions.

1. REVIEW OF RETENTION RESEARCH IN HIGHER EDUCATION

In this chapter, issues relating to a definition of course non-completion are outlined. The findings of research on non-completion in Institutes of Technology in Ireland are considered, following which some relevant literature on the factors associated with non-completion, mostly based on studies in the United States and Great Britain is reviewed. The role of individual student factors, as well as of factors in higher education institutions, in student retention is considered. The review is restricted to undergraduate courses.

DEFINING NON-COMPLETION IN HIGHER EDUCATION

While student non-completion has been the focus of much research for many years, particularly in the United States, the findings of many studies have had limited value due to problems in defining what non-completion actually is. Various terms, such as attrition, withdrawal, non-persistence, non-completion, and dropout, have been used, definitions have varied, as have the situations in which the phenomenon has been studied, making interpretation of findings, and their generalisation, problematic. The fact that inadequate attention has often been given to definition has led one commentator to observe that some researchers may "lump together, under the rubric of dropout, forms of leaving behavior that are very different in character ... Because of the failure to make such distinctions, past research has often produced findings contradictory in character and/or misleading in implication" (Tinto, 1975, p. 89). For example, there is a variety of ways in which students can fail to complete a course: some register but never actually begin the course (non-starter); others go through formal procedures before leaving (formal withdrawal); some withdraw informally (informal withdrawal); some may not attend lectures or complete required coursework but do not actually formally withdraw (non-continuer); some fail exams and subsequently leave (academic failure); and some just move to another course at the same or another institution (transfer to other programmes) (Kember, 1995).

Until quite recently, little research was carried out on retention in higher education in Ireland. There are two possible reasons for this. First, non-completion might have been considered to be due to factors beyond the control of colleges. In particular, student motivations and expectations are difficult to influence. Thus, research would have been of little value since little could have been done to influence

or address non-completion (Martinez, 1995). Secondly, non-completion was to be expected, and might as well be accepted as a fact of life; indeed college enrolment practices were often based on the assumption that large numbers would drop out early in their course (McGivney, 1996). These assumptions are now being questioned as the need for increased efficiency gives rise to concern about levels of non-completion (Kenwright, 1997).

Given the large numbers of students enrolled in higher education, some amount of student non-completion is to be expected. While concern might be expressed about this situation, it should also be acknowledged that there can be positive as well as negative consequences to non-completion. Not all students enter higher education with the intention of completing and graduating from their course. Some leave because they have achieved their learning goals; others because they want to transfer to another course or institution or because they have found employment. In such cases, a negative term such as 'dropout' is inappropriate as students' choices, aspirations and circumstances change and for some individuals benefits may be gained only by leaving. Tinto (1987) has observed that "if the leaver does not define his/her own behavior as representing a form of failure, neither should the institution" (p.141).

Having said that, it should also be recognised that failure to complete a course can have negative personal consequences for students and their families. From an institutional perspective, non-completion is not only costly in terms of lost revenue, it is damaging to an institution's reputation, and is often associated with low staff morale. From a national perspective, non-completion represents an inefficient use of limited educational resources and a loss of future skills. Given that public expenditure per student in the third-level sector in 1999/2000 came to £4,604 (compared to £2,181 at first level and £3,235 at second level), the financial implications of high rates of non-completion in higher education cannot be regarded as inconsequential.

NON-COMPLETION IN INSTITUTES OF TECHNOLOGY

The available research in Ireland indicates that Institutes of Technology have high rates of non-completion. In 1999, The Educational Research Centre obtained progression data on first-time entrants in 1995 in eleven Institutes of Technology (Morgan, Flanagan, & Kellaghan, 2000) relating to (i) the number of male and female students entering each course in that year, (ii) the number who proceeded to successive years of each course, and (iii) the number graduating/not completing each course.

Data were also collected on the destinations of students who did not progress to second year.

Of the 11,175 students who began their courses in 1995, just over half (52.07%) graduated on time; a small percentage (5.33%) graduated late or were still in attendance in 1998-99; and just over two-fifths (42.61%) did not complete the courses they had enrolled in when they entered college.

There were major gender differences. Nearly three-fifths of females graduated on time, compared to less than half of males. Conversely, a greater percentage of males (46.8%) than of females (36.9%) failed to complete their courses. Differences in completion rates between fields of study were considerable. The highest rate of completion was in Humanities, in which nearly two-thirds of students graduated on time and one-third did not finish. The next highest rate was in Business Studies, in which nearly three-fifths graduated on time and just over one-third did not complete. Just over half of students embarking on Science courses graduated on time, and nearly two-fifths did not complete their studies. Completion rates were low in Engineering and Computing. Just over two-fifths of students who began courses in these areas graduated on time, and half did not complete their courses at all.

Gender differences in completion were related to field of study and the particular Institute being attended. Furthermore, the completion rate for students taking degree courses was somewhat higher than for students taking National Certificate or Diploma courses.

While it was not possible to track non-progressing students in all years of their studies, information was sought on students who did not progress from first to second year (34.8% of those who entered ITs in 1995). The vast majority of these fell into one of two categories, both of which involved withdrawing from the Institute. Over two-fifths had failed their examinations and then withdrawn, while over one-third withdrew before sitting their first year examinations. Only one-seventh of the students who did not progress from first to second year were repeating the course, having failed examinations.

Healy, Carpenter, and Lynch (1999), in a study of first-year students enrolled in three ITs (Carlow, Dundalk and Tralee) in 1996-97 found that the non-completion rate was 37%. Individual student data were obtained in an attempt to find reasons for non-completion. As in many studies that have compared students who completed their courses with those who did not, the study examined (i) personal and background

factors, (ii) students' preparation and readiness for college and courses, and (iii) students' experiences of college. Students who did and did not complete their courses did not differ in gender or age. However, a significant difference was found between the socioeconomic status of students who failed/left and those who passed. Students with fathers in the 'professional workers, employers and managers', 'salaried and non-manual workers' and 'skilled manual workers' categories were more likely to fail or leave than students with fathers in 'farmers and other agricultural workers' and 'semi-skilled, unskilled manual workers' categories.

Another important difference concerned students' academic performance prior to entering the Institutes. Average Leaving Certificate Examination points for those who did not progress was 235, while the average for those who did was 279. Students who did not progress were also more likely than those who remained to say that they had been poorly prepared for college entry in general and for the course on which they had embarked in particular. Furthermore, non-completers were more likely to say that the course on which they embarked had not been their first choice on their application form for college.

A number of differences between students who completed and those who did not were reported for students' experiences of college. As might be expected, students who had failed and left were more likely than students who had passed to have experienced difficulty with at least some of the subjects on their course. There was also a tendency for students who did not complete to be more critical of teaching quality in ITs.

FACTORS ASSOCIATED WITH NON-COMPLETION

Since the study described in this report was concerned with features of the experiences of students in ITs that are of most relevance to course completion, it is appropriate at this stage to review literature on non-completion, especially studies that have tried to move from a description to an explanation of findings.

It is clear that a full account of non-completion will require explanations at various levels, which may be categorised as institution, department/subject, and individual student levels. It is also evident that efforts to provide such a comprehensive account have not been especially successful and in some cases have provoked acrimonious debate. For example, a study by Johnes and Taylor (1989) examined non-completion rates in UK universities while taking into account the major factors that influence rates of completion (e.g., scholastic ability). One of its findings

was that even after controlling for important intake factors, Scottish universities had a higher non-completion rate than other institutions. This led to criticism of the findings by McPherson and Paterson (1990) who claimed that the study did not measure ability appropriately and did not allow for other factors that might account for inter-institutional differences.

Another important limitation of the literature from the perspective of the ITs is that it focuses largely on institutions in which the kinds of courses offered differ from those in ITs, as well as the fact that the characteristics of students in the institutions may differ from the characteristics of students in ITs. For example, very little literature is concerned with courses of two-year duration, which comprise the majority of courses in the IT sector. For these reasons, it might be argued that the most relevant studies would be ones relating to the new (post-1992) universities in the UK (former polytechnics) which are similar in a number of respects to ITs. However, even this comparison may not be entirely appropriate since most of the students attending the new universities take degree courses.

In the brief review that follows, distinctions between types of third-level education are not made. While it is recognised that higher education systems differ in their organisation, content, and structure, and that these might have implications for students' persistence rates, at the same time, it is likely that some factors are common to all types of third-level institutions, a view which is supported by the available research. The review, based for the most part on research carried out in the United States and Great Britain considers the role of individual factors (such as students' personal characteristics, family background, and finances), of institutional factors (college type, size, and selectivity), and of the interaction of individual and institutional factors (social and academic integration).

Individual Factors

Students enter higher education with a range of individual characteristics which influence their ability and commitment to persist until completion of a course. The individual characteristics that appear most frequently in the literature are age, gender, family background, personality, pre-college achievement, and finances.

Age

While the relationship between non-completion and age has been investigated in a substantial number of studies, the evidence is inconclusive. Some findings indicate that the older the student, the more likely he or she is to drop out (Clarke, Burnett, &

Dart, 1994). However, the effects of age appear to be mediated by other factors. As well as having spent some years out of full-time education, older students may be subject to external demands which can affect their integration into college (Garrison, 1985; Naretto, 1991). They are more likely than younger students to have family responsibilities, to live off campus, and to be employed (Ozga & Sukhnandan, 1998; Yorke, 1999), and more frequently report that financial problems and a lack of support from their families influenced their decisions to withdraw. On the other hand, older students enter college with clearer expectations of college and their course compared to younger students who more often experience problems relating to underpreparedness such as wrong choice of course or college, loneliness, and accommodation difficulties (Yorke, 1999).

Gender

Evidence on gender and its relationship to non-completion suggests that women are more likely than men to complete their course, except in courses in which they are a minority, for example Engineering and Technology Management (McGivney, 1996). Lynch et al. (1999), however, found almost no gender differences in non-completion in Irish universities and colleges of education.

The reasons men and women give for non-completion differ (Astin, 1975). Family commitments, particularly childcare, are cited by significantly more women (Nora, Cabrera, Hagedorn, & Pascarella, 1996; Scott, Burns, & Cooney, 1996), while men tend to stress course and employment related issues. Reasons that are frequently cited by both sexes are finances, dissatisfaction with college, lack of interest in studies, and uncertain career plans (Tinto, 1993).

Family Background

In his review of the literature, Tinto (1993) found that a student's socioeconomic status played an important part in completing a course. Studies in the UK (Johnes, 1990) and in Europe (Moortgat, 1997) indicate that students from lower socioeconomic groups have higher non-completion rates. Students whose parents are more highly educated, on the other hand, are less likely to drop out (Astin, 1975). The motivational climate of the family and the quality of the relationship between student and his or her parents also seem important. Numerous studies have reported that the aspirations and expectations parents have for their child's future have a strong effect on their commitment to the goal of graduation from college (Trent & Ruyle, 1965).

Living Arrangements

The location of a student's home in relation to college is important in persistence. While there is some evidence that living at home can increase non-completion (Johnes & Taylor, 1989), living too far from campus can have the same effect, with the amount of time students spend commuting adversely affecting their involvement in college (Astin, 1973).

Personality

Despite the fact that the role played by personality characteristics has been studied extensively, research to date has not been successful in providing a unique personality profile for non-completers. Some studies have found dropouts to be aloof, selfcentred, critical, impetuous, and resentful of college academic and social regulations (Hannah, 1971; Summerskill, 1962), while others have found them to be autonomous, mature, intellectually committed, and creative (Kenniston, 1968; Trent & Ruyle, 1965). On the basis of these studies, it would seem that the factors behind the decision to drop out are too varied to be accurately predicted by personality traits alone.

Preparedness for college

The association between inadequate preparedness for college and student withdrawal is well documented (Healy et al., 1999; Ozga & Sukhnandan 1998; Yorke 1999). Factors such as choosing the wrong course or college, lack of preparation and commitment, regularly appear as reasons for non-completion. If students are not well-informed on the basic issues involved in choosing a college or course, they may make haphazard selections, resulting in the choice of an unsuitable course (Tinto, 1987). Not surprisingly, poor choices have direct effects on non-completion. Although a wide range of information on courses and colleges is available to all potential students, many make their choices by relying on friends' opinions and impressions they have of their ideal institution (James, Baldwin, & McInnis, 1999).

Pre-college Achievement

A substantial body of research indicates that the quality of a student's academic performance in secondary school is positively related to achievement in higher education (Chapman, 1996; Hoskins, Newstead, & Dennis, 1997; Peers & Johnston, 1994) and that the least well prepared students are more likely to drop out (Astin, Korn & Green, 1987). Measures of student achievement have included performance on the Leaving Certificate Examination, average high school grade, rank in high school

graduating class, and academic ability as measured by college admissions test scores. In Ireland, a clear relationship was observed between the scores required for admission to courses (based on Leaving Certificate Examination grades) and course completion in undergraduate university courses (Morgan, Flanagan, & Kellaghan, 2001). In Great Britain, Johnes and Taylor (1990) found that students with better A-level results were less likely to withdraw or fail.

In a study for the Commission on the Points System (1998), the relationship between performance on the Leaving Certificate Examination and final year performance in third-level institutions was inconsistent. Students who passed first year and withdrew had performed better on the Leaving Certificate Examination than students who received a third class honours degree, and was similar to the performance of those who had received a lower second class honours degree and of those who were still attending. Students with identical Leaving Certificate grades had a higher probability of not completing in some fields than in others. While Humanities had a non-completion rate of only 6%, the corresponding figure for Science was 20 percent. LCGPA score, grade, and field of study were related to the Leaving Certificate Examination scores of students who passed first year and then withdrew. In the Humanities and Science, such students had a substantially better Leaving Certificate performance than students who graduated, even ones who obtained first class honours, pointing to the fact that factors other than students' prior achievement play a role in retention (Lynch et al., 1999).

Finances

Financial considerations can influence not only the decision of prospective students to attend college, but also choice of course and location of college, which in turn may affect retention. While attending college, finances can affect retention directly, as many students work to at least partially support themselves, while others can struggle to subsist without a job. It is not surprising, therefore, that financial difficulty is one of the reasons frequently cited for dropping out of college (Martin, 1985; Pantages & Creedon, 1978); particularly among mature and working class students (Yorke, 1999). Though there can be little doubt that personal finances affect levels of non-completion, there are still questions about how and why they do. Financial considerations arise even before students enter higher education, and can influence their decision to attend college, the type and location of college they choose, and the duration of the course chosen. Yorke (1999) found that financial problems more frequently influenced the

decision of older students and working class students to drop out, while Manski & Wise (1983) found that financial considerations were particularly likely to affect younger students without parental support.

While at college, money worries can impact on students' participation in college activities when students have to work in order to make ends meet. Concern has been expressed about the significant number of students whose integration into college life is being adversely affected by the long hours that they are spending in employment (McInnis & James, 1995). Studies carried out in the US (Nora, 1992; Nora et al.,1996) have found that financial difficulties and working while attending college had a negative effect on student retention.

However, not all students who have financial difficulties leave college. Tinto (1993) found that students were more likely to drop out if they experienced 'poverty' early on in a course when the benefits of a college degree were still distant and uncertain. Students in later years of their course were prepared to put up with the strain of living with limited resources, presumably because they had already invested a lot of time, money, and effort, and had the goal of graduation in their sights. In any case, while financial difficulties rank high among the reasons most commonly given for dropping out, it is but one (albeit an important one) of a number of factors involved in non-completion (Stampen & Cabrera, 1986). Furthermore, it should be recognised that citing financial problems as a reason for leaving college may represent a form of rationalisation on the part of the student (Cope & Hannah, 1975).

Institutional Factors

While most studies on non-completion have focused on individual rather than institutional factors, the latter have not been ignored. The available evidence suggests that college characteristics (college type, college size, and selectivity) can play an important role in determining student retention.

College Type

Since institutional characteristics play a significant part in fulfilling a student's expectations of college life, it is not surprising that the type of institution attended is likely to affect retention (Pascarella & Terenzini, 1991). Astin, Korn and Berz (1990) found that students in two-year colleges were less likely to hold high educational goals and were more likely to leave early than students in four-year colleges. However, they also noted that some students enter two-year colleges with the intention of transferring

before completing a course, and for them dropping out is a positive step in their educational careers.

College Size

Tinto (1975) reported that there was evidence that the size of an institution was related to non-completion, "but in a manner as yet unclear" (p. 115). While larger colleges may increase the opportunity for greater social and academic experiences, on the other hand, for some students, especially those who have difficulty making friends, such colleges may affect integration. Feldman and Newcomb (1969), for instance, found that large institutions are less likely to be regarded as friendly, that they can affect students' confidence in terms of their social acceptability and perceptions of academic ability, and that amount of student-staff contact is likely to be limited. Any of these factors can lead to increased levels of student dissatisfaction with an institution. On the other hand, problems can arise in small colleges from too much closeness and a lack of diversity (Astin, 1975).

College Selectivity

The concept of the "social status" effect of educational institutions has been invoked to explain dropout. According to Tinto (1975), "the higher the average social status composition of the institution, the higher will be the perceived value of that education by the individuals in that institution. Since higher quality institutions also tend to have student bodies that are higher in average social status, it follows from the generalised theory of cost-benefit analysis that rates of dropout would be lower at institution (e.g., an elite college) will increase one's chances of a successful career may be an important factor in retention. In this situation, many students may choose to persevere to complete a course, even if they are dissatisfied, because of the perceived benefits of obtaining a degree from a particular college.

Individual/Institutional Factors

Academic Integration

It seems reasonable to assume that to succeed at college, a student needs both the skills for learning and an understanding of the values of the college (Tinto, 1993). Many students enter college only to realise that they are inadequately prepared academically, or that their beliefs and values conflict with those of the institution. As a result they

experience a gap between their expectations and experience, and this gap has been identified as a factor associated with non-completion (Clarke, Burnett, & Dart, 1994). Many underestimate the amount of study and class work required, and the difficulty in attaining the standards required (McInnis & James, 1995). Some also fail to realise the importance of attendance. A mismatch between a student's expectations of college in general and a course of study in particular and the actual reality can lead to trouble (Ozga & Sukhnandan, 1998).

When a student's goals and expectations are met by the college, then from his or her point of view, a good match exists. Similarly, a good match exists if a student's academic and social aptitudes match the mission of the college. Furthermore, students are much more likely to persist if they have a sense of belonging and a perception that their needs are being met (Osterman, 2000). The fact that a student and college are incompatible is often realised too late, when the student is already attending college and experiencing problems.

In a study of withdrawal from UK colleges, Rickinson and Rutherford (1996) found that many students thought that they would have benefited greatly from a clearer understanding of the level and requirements of their course prior to enrolment. In particular, they took the view that their educational experiences before entering higher education had not prepared them to cope with its demands. Being unprepared for higher education was also identified as a major factor in a study by Ozga and Sukhnandan (1997), while a study by Yorke (1999) showed that 'choosing the wrong course' of study was the most frequently endorsed cause of non-completion, followed by 'programme not what I expected' and 'institution not what I expected'. The quality of students' experiences, particularly their experience of teaching, was also important. 'Teaching did not suit me' was one of the most important reasons given by students for non-completion; related concerns included 'quality of teaching', 'lack of personal support from staff', and 'inadequate staff support outside the timetable'.

Educational commitment at the time of entering college is very important when considering factors influencing non-completion (Astin, 1975). The unavoidable fact is that completing a course at college requires a lot of effort, dedication of time to study, and input of often scarce resources to meet the variety of academic and social demands made on students. Absenteeism is one of the first signs that a student is dissatisfied with college, is under stress, or is having difficulties with coursework (Bean, 1986). Many of the studies that have analysed reasons for non-completion report that

motivational factors (lack of interest in college, lack of interest in studies) contribute substantially to non-completion. In their review of US studies, Pascarella and Terenzini (1991) noted that the more the student invested in his or her education, the more likely he or she was to complete the programme. In fact, Tinto (1975) gave goal and institutional commitments a central place in his theory of persistence. The model argues that "it is the interplay between the individual's commitment to the goal of college completion and his commitment to the institution that determines whether or not the individual decides to drop out from college and the forms of dropout behavior the individual adopts" (p. 96).

Few students can survive the academic demands of college without possessing good study skills. In particular, time management, use of library, reading and writing skills, note-taking and preparation for exams can affect academic performance (Bean, 1986). If students' study habits are poor, the chances of dropping out due to poor academic performance are dramatically increased. According to Demitroff (1974) non-completers were more likely to describe their study habits as below average. It may be for this reason that Trent and Ruyle (1965) found that persisters estimated that they spent more time than they perceived the "average" student to spend in study.

Students' satisfaction with their college experiences and involvement with their college have been described as important in the student retention literature. In particular, satisfaction with the quality and style of teaching, the level of support given by staff, and the organisation of the programme are important (Healy et al., 1999; Yorke, 1999). The degree of contact between students and staff and the quality of the contact has also been identified as a strong contributor to academic and social integration and to student retention (Pascarella & Terenzini, 1980).

Social Integration

Research findings point to the important role that social integration plays in student retention (Nora, 1987; Pascarella & Terenzini, 1980; Tinto, 1993). Social integration is especially important in the case of first year students (Neumann & Finaly-Neumann, 1989) and non-traditional students (Ashar & Skenes, 1993). However, integration will mean different things for different types of students (e.g., commuter and residential) (Pascarella & Chapman, 1983).

Finding a niche in which students share values and support each other through friendship is typically viewed as central to retention (Tinto, 1975). It is very important that the student feel at home and happy with his/her new environment as feelings of

isolation are often the cause of leaving, especially in the first semester of the first year (Yorke, 1999). While many students overcome the loneliness, others, especially those who have difficulty in making new friends, do not, and often aggravate the problem by socialising with friends who are not students (Christie & Dinham, 1991). Students who have close friendships on campus are more likely to be satisfied with their role as students and feel that they fit in at college. Social events, living arrangements, and social clubs can all promote friendships.

It is not surprising that the amount of contact between students and staff, and the quality of that contact, have been found to be positively related to a student's social integration and academic performance in college (Pascarella & Terenzini, 1980). Positive interactions not only facilitate the development of healthy attitudes towards study, but also assist student institutional commitment (Panos & Astin, 1968). Informal (out-of-class) student-staff contact in which staff developed a friendly relationship with students and displayed concern with their emotional wellbeing was found to be especially important. Such interaction was associated with increased satisfaction with college, higher educational aspirations and academic achievement, and enhanced intellectual and personal development, as well as higher rates of freshman to sophomore year retention (Pascarella, 1980).

While involvement in extracurricular activities (athletics, societies, student government, etc) are not considered crucial to retention, they do contribute to social integration. According to Astin (1977, 1985) anything that brings students to campus on a regular basis and helps increase contact with staff and friends will promote students' satisfaction with college and strengthen their institutional commitment.

CONCLUSION

This chapter provided an overview of the results of studies of non-completion in Institutes of Technology in Ireland. While it is important to acknowledge that given the expansion in the numbers of students entering higher education, a certain amount of non-completion is to be expected, there is evidence to suggest the non-completion rate among Irish IT students is very high. The chapter also contains a review of studies of non-completion in third-level institutions in this country and elsewhere.

The study described in this report was designed to elicit information from students about their attitudes towards, and their experience of, attending their chosen IT that might have implications for course non-completion. Interviews were also held

with lecturers in a number of ITs, in which issues relating to students' preparedness for college, course-related matters, staff-student contact, college services and facilities, and financial and employment issues were explored.

2. METHODOLOGY

In this chapter the main features of the methodology of the survey are described. The focus of the description is on the target population, how courses were selected for inclusion, and the method used to collect data. Data were collected in a questionnaire survey of students in selected courses, and in a series of semi-structured interviews with lecturing staff for some of the selected courses.

QUESTIONNAIRE SURVEY

Target population

The target population comprised all first year students enrolled in one of six preselected courses in eleven Institutes of Technology (ITs) in the academic year, 2000-2001. Eleven Institutes were included in the study: Athlone, Carlow, Cork, Dundalk, Galway-Mayo (Galway and Castlebar campuses), Letterkenny, Limerick, Sligo, Tallaght, Tralee, and Waterford.

Selection of courses

Six courses of study at National Certificate level were selected for investigation: Business Studies, Computing, Construction Studies, Office Information Systems, Electronics, and Science. These were chosen as they were common across most Institutes of Technology. For each selected course, at least four ITs were chosen. The results of a previous study examining rates of non-completion in Institutes of Technology (Morgan, Flanagan & Kellaghan, 2000) formed the basis for selection. For each course of study, two ITs that had been found to have high non-completion rates in that particular course and two that had been found to have low non-completion rates were selected. The one exception was Electronics; the only IT with low noncompletion in this course was Waterford and therefore the other three ITs selected had high non-completion rates.

Each IT had a minimum of two courses selected for investigation (Waterford and Galway-Mayo had three each). To achieve balance, every attempt was made to ensure that each IT would have one selected course with a low non-completion rate and one with a high non-completion rate. However, in the case of Dundalk and Letterkenny, both courses selected had high non-completion rates as no course with a low non-completion rate was available among the six chosen courses. In contrast,

Waterford had no course with a high non-completion rate and therefore the three courses selected had low non-completion rates.

Instrument

A student satisfaction questionnaire was designed to elicit information about students, their attitudes towards, and their experience of, attending their chosen IT (see Appendix A). The questionnaire sought information on: (i) students' general background, (ii) matters relating to students' choice of course, (iii) students' expectations and experience of course/college, (iv) students' attendance and thoughts of leaving the course/college, (v) course organisation, (vi) students' sources of financial aid and employment, and (vii) students' satisfaction with various features of the course including support services.

Procedure

The data collection followed the identification and appointment of a co-ordinator in each IT with responsibility for overseeing the administration of the questionnaire. The Educational Research Centre liaised with the appointed person and frequent written and verbal communication ensured uniformity in procedures and organisation across Institutes. Once class sizes were established, questionnaires were supplied to course lecturers, who administered them to students. Administration took place during a midweek timetabled lecture between the months of February and April 2001. Lecturers were given instructions on administration, with particular emphasis on the confidentiality of responses. All students who were attending the lecture were asked to complete the questionnaire. Upon completion, the questionnaires were collected and placed in an envelope, which was sealed in front of the class group and returned directly to the Educational Research Centre.

This procedure was followed in each IT with the exception of one course in Waterford IT (Construction Studies) where the lecturer did not administer the questionnaire during lecture time, but rather, requested students to complete the questionnaire in their own time and to return it to him at a later date.

Survey response rates

Data from the eleven ITs indicate that a total of 2,322 students were registered in first year in the courses chosen. Overall, 1,352 questionnaires were returned giving a total response rate of 58.22%. One questionnaire was omitted as it was deemed unusable and 1,351 questionnaires were subsequently analysed (Table 2.1).

	Number sent	Number returned	% Returned
Athlone	275	173	62.91
Carlow	141	90	63.83
Cork	190	116	61.05
Dundalk	281	174	61.92
GMIT-C	119	83	69.75
GMIT-G	236	137	58.05
Letterkenny	133	63	47.37
Limerick	201	96	47.76
Sligo	97	66	68.04
Tallaght	413	210	50.85
Tralee	136	101	72.26
Waterford	100	42	42.00
Total	2322	1352	58.22

Table 2.1. Number of questionnaires sent and returned, and percentage of questionnaires returned, by IT.

Tralee had the highest percentage of the total relevant student population completing the questionnaire (72.26%), while Waterford had the lowest (42%). However, the latter percentage is misleading as the return rate for Computing and Electronics courses averaged 61.54%, but the return rate for Construction Studies (20.83%) brought down this average (see 'Procedure' above). If Waterford is excluded, the lowest percentages of the student population responded in Letterkenny (47.37%) and Limerick (47.76%). Also of note is the difference in response rates from the GMIT Galway and Castlebar campuses (58.47% and 69.75%, respectively).

Looking at the response rates across courses for all Institutes of Technology, Office Information Systems (71.00%) had the highest return of completed questionnaires and Construction Studies (52.55%) the lowest. Approximately threefifths of Science (60.01%) and Computing (58.77%) students returned questionnaires (Table 2.2).

Table 2.2.	Mean	percentage	of c	juestionnaires	completed	and	returned,	by course.
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	N (ITs)	Mean %
Science	4	60.01
Business Studies	4	56.15
Office Information Systems	4	71.00
Construction Studies	5	52.55
Computing	5	58.77
Electronics	5	55.41

Respondents from Tallaght comprised the largest college group (15.5%), while Waterford respondents comprised the smallest (3.1%). Business Studies was the course with the largest number of respondents (36.5% of the sample), while Electronics had fewer respondents (8.4% of the sample) than any other course (Table 2.3).

	Scie	ence	Busi	ness dies	Of	fice	Constr	uction	Com	puting	Elect	ronics	Тс	otal
			Stu	ules	Syst	tems	Stut	105						
	N	%	Ν	%	N	%	N	%	N	%	Ν	%	N	%
Athlone	25	1.8	148	10.9	-	-	-	-	-	-	-	-	173	12.8
Carlow	28	2.1	-	-	62	4.6	-	-	-	-	-	-	90	6.7
Cork	85	6.3	-	-	-	-	-	-	31	2.3	-	-	116	8.6
Dundalk	-	-	118	8.7	56	4.1	-	-	-	-	-	-	174	12.9
GMIT-C	-	-	I	-	-	-	14	1.0	53	3.9	16	1.2	83	6.1
GMIT-G	-	-	I	-	-	-	36	2.7	55	4.1	46	3.4	137	10.1
Letterkenny	-	-	48	3.6	-	-	-	-	-	-	15	1.1	63	4.7
Limerick	-	-	I	-	-	-	49	3.6	47	3.5	I	-	96	7.1
Sligo	-	-	I	-	48	3.5	-	-	-	-	18	1.3	66	4.9
Tallaght	31	2.3	179	13.3	-	-	-	-	-	-	I	-	210	15.5
Tralee	-	-	I	-	79	5.9	22	1.6	-	-	I	-	101	7.5
Waterford	-	-	-	-	-	-	10	0.7	14	1.0	18	1.3	42	3.1
Total	169	12.5	493	36.5	245	18.1	131	9.7	200	14.8	113	8.4	1351	100.0

Table 2.3. Number and percentage of respondents, by IT, and course.

Many courses of study were heavily "gendered". Less than 10% of respondents on the Construction Studies and Electronics courses were female, while less than 10% of Office Information Systems respondents were male (Table 2.4).

|--|

	Male		Fen	Total ¹	
	Ν	%	Ν	%	Ν
Science	66	39.1	101	59.8	169
Business Studies	209	42.4	281	57.0	493
Office Information Systems	19	7.8	225	91.8	245
Construction Studies	121	92.4	10	7.6	131
Computing	129	64.5	70	35.0	200
Electronics	104	92.0	9	8.0	113

¹ As gender is not known for all respondents, totals may be greater than the sum of male and female students. Percentages refer to total N, rather than to percentage of N whose gender is known.

SEMI-STRUCTURED INTERVIEWS

Semi-structured interviews were held between April and November 2001 with groups of lecturing staff (3 to 6 staff members) in the Institutes of Technology. Staff were teaching the six National Certificate courses which had been selected for the student survey. Due to time constraints, only seven ITs were involved in the interviews: Athlone, Carlow, Dundalk, Galway-Mayo, Letterkenny, Limerick, and Waterford. In order to achieve a balance, for each course of study at least two ITs were selected, with one exception (Computing), where only one IT was selected. The selected courses and associated institutions were as follows: Science (Athlone and Carlow); Business Studies (Athlone, Dundalk, and Letterkenny); Office Information Systems (Dundalk and Carlow); Construction Studies (Galway-Mayo and Limerick); Computing (Waterford); and Electronics (Letterkenny and Waterford).

Initial contact was made with the appointed liaison person in each IT who arranged a convenient time to meet the lecturing staff in each course. A researcher from the Educational Research Centre travelled to each college and conducted the interview which lasted approximately one hour. Issues relating to (i) preparedness for college, (ii) course-related matters, (iii) staff-student contact, (iv) college services and facilities, and (v) financial and employment issues were explored in each interview (see Appendix B).

3. RESULTS OF STUDENT SURVEY

This chapter presents data from questionnaires completed by 1,351 students in eleven Institutes of Technology. Data for the total sample are reported, as are significant differences by gender, course or college, when they arose.

RESPONDENTS

Of those who completed the questionnaire, 648 (48.0%) were male, 696 (51.5%) were female, and seven (0.5%) did not specify their gender (see Table C1 for number of male and female respondents, by course and by college). Respondents' average age was 19.1 years, with a standard deviation of 2.95. The youngest student surveyed was 17 and the oldest was 51, with most (91.5%) aged between 17 and 20. Almost all (97.3%) were single, ten (0.7%) were married, and five (0.4%) described their marital status as "Other". Twenty-two (1.6%) did not supply details of their marital status.

LIVING ARRANGEMENTS AND TRANSPORTATION

Over half the respondents (57.6%) lived in the parental home during the academic year (Table 3.1). The next most commonly reported living arrangement was in rented accommodation (28.7%), or in digs (10.5%). Only 1.9% lived in their own home, while 1.3% reported other types of arrangements (typically, living with relatives). There were some gender differences ($\chi^2 = 17.617$, df = 4, p = .001). Female students were less likely than male students to live in digs (8.2% versus 13.1%) and more likely to live in rented accommodation (31.7% versus 25.5%).

	Male		Fen	nale	Total		
	Ν	%	Ν	%	N	%	
Parental home	383	59.2	388	56.0	776	57.6	
Rented house/flat	165	25.5	220	31.7	387	28.7	
Digs	85	13.1	57	8.2	142	10.5	
Own house/flat	10	1.5	15	2.2	25	1.9	
Other	4	0.6	13	1.9	17	1.3	

Table 3.1. Number and percentage of respondents, by gender, reporting various types of living arrangements during the academic year.

Living arrangements during the academic year differed between ITs (Table 3.2). A majority in Carlow (59.6%), Cork (68.1%), Dundalk (76.9%) and Letterkenny (59.7%) reported that they lived in the parental home, as did almost all students (96.7%) in Tallaght. In contrast, only 22.7% of Sligo respondents said that they lived

at home during the academic year, while 57.6% lived in rented accommodation. Living in digs was most common among Limerick (24%) and Tralee (20.8%) respondents, and least common among Letterkenny (0%) and Tallaght (1%) respondents. Letterkenny had the largest proportion of students (6.5%) living in their own house or flat.

	Parental home	Rented Flat/House	Digs	Own House/Flat	Other
Athlone (N=173)	41.0	41.0	12.7	2.3	2.9
Carlow (N=89)	59.6	27.0	11.2	1.1	1.1
Cork (N=116)	68.1	20.7	7.8	1.7	1.7
Dundalk (N=173)	76.9	16.8	4.0	2.3	0.0
GMIT-C (N=83)	43.4	39.8	13.3	2.4	1.2
GMIT-G (N=136)	39.7	45.6	13.2	1.5	0.0
Letterkenny (N=62)	59.7	32.3	0.0	6.5	1.6
Limerick (N=96)	42.7	31.3	24.0	0.0	2.1
Sligo (N=66)	22.7	57.6	16.7	1.5	1.5
Tallaght (N=210)	96.7	0.0	1.0	1.0	1.4
Tralee (N=101)	34.7	41.6	20.8	2.0	1.0
Waterford (N=42)	45.2	33.3	19.0	2.4	0.0

Table 3.2. Percentage of respondents, by IT, reporting various types of living arrangements during the academic year.

Students were asked to indicate with whom (if anyone) they lived during the academic year (Table 3.3). Most lived with their parents (56.4%), or with other students (34.6%). In total, 61.1% of respondents lived in some form of family unit (e.g., living with parents only, parents and siblings, or spouse and own child).

Table 3.3. 1	Number and percentage of respondents	s, indicating their relationship to the
people with	whom they lived during the academic	year.

	Ν	%
Parents	762	56.4
Other students	468	34.6
Spouse/partner	285	2.1
Other relatives	54	4.0
Non-student friends	43	3.2
Own child(ren)	27	2.0
Alone	11	0.8
Other	38	2.8

Over two-thirds (69.2%) indicated that they rarely or never missed classes due to transport problems (Table 3.4). Transport difficulties were significantly related to

college location ($\chi^2 = 95.95$, df = 33, p < .001). For example, while none of the students in Sligo frequently missed classes due to transportation problems, 10.3% of those in Cork and 9% of those in Tallaght did. Approximately one-third of students in GMIT-C, Tallaght, and Cork reported occasionally missing classes. Whilst almost half of the respondents in Athlone, Sligo and Tralee never missed classes due to transportation problems, this was true of only 19% of respondents in Cork.

	Frequently	Occasionally	Rarely	Never
Athlone (N=172)	1.2	20.3	30.8	47.7
Carlow (N=89)	1.1	22.5	33.7	42.7
Cork (N=116)	10.3	32.8	37.9	19.0
Dundalk (N=173)	6.9	28.3	35.8	28.9
GMIT-C (N=82)	7.3	35.4	30.5	26.8
GMIT-G (N=134)	3.0	22.4	31.3	43.3
Letterkenny (N=63)	4.8	22.2	39.7	33.3
Limerick (N=95)	3.2	24.2	36.8	35.8
Sligo (N=66)	0.0	13.6	37.9	48.5
Tallaght (N=210)	9.0	35.2	26.7	29.0
Tralee (N=101)	1.0	17.8	34.7	46.5
Waterford (N=42)	2.4	23.8	42.9	31.0
Total (N=1343)	4.8	26.0	33.5	35.7

Table 3.4. Percentage of respondents, by IT, indicating the frequency with which they missed classes due to transportation problems.

Missing classes due to transportation difficulties was significantly related to living arrangements ($\chi^2 = 68.66$, df = 12, p < .001). Those living in digs had the lowest percentage of respondents (14.9%) who said that they either frequently or occasionally missed classes due to transport problems (Table 3.5).

Table 3.5. Percentage of respondents, by living arrangement, indicating the frequency with which they missed classes due to transport problems.

	Fraguantly	Occasionally	Doroly	Nover
	riequentiy	Occasionally	Kalely	INEVEL
Parental home (N=773)	5.4	30.5	36.4	27.7
Rented House/Flat (N=384)	3.6	21.6	30.2	44.5
Digs (N=141)	2.1	12.8	31.9	53.2
Own House/Flat (N=24)	8.3	25.0	16.7	50.0
Other (N=17)	11.8	29.4	11.8	47.1

Thirty-nine respondents (2.9%) indicated that they were the main carer for a dependent child or adult. Perhaps surprisingly, there is not a significant gender difference (43.6% were male and 56.4% were female). Over one-third (37.1%) of

carers indicated that they missed classes either frequently or occasionally due to problems with childcare arrangements. When asked if they had difficulty financing care arrangements, one-fifth said that this was very much the case, while just over onethird (34.3%) indicated that it was somewhat the case (Table 3.6).

Table 3.6. Percentage of respondents who were main carers for a dependent indicating how frequently they missed classes due to difficulty with care arrangements, and the extent of their difficulty in financing care arrangements.

Miss class due to care	Frequently Occasionally		Rarely	Never
arrangements (N=35)	11.4	25.7	42.9	20.0
Difficulty financing	V. much so	Somewhat	Not really	No/NA
care (N=35)	20.0	34.3	22.9	22.9

FAMILY BACKGROUND

Respondents were asked to indicate the highest level of education attained by their parents. Respondents' mothers had a slightly higher level of educational attainment than their fathers (t = 3.64, df = 938, p < .001), although maternal and paternal education tended to be correlated. A larger percentage of fathers (18.9%) than of mothers (12.6%) was described as having left school during or after primary level (Table 3.7). More than half of the respondents' mothers (53.2%) had completed either the Intermediate or Leaving Certificate (or equivalent programmes), compared to 45.4% of fathers. Less than 15% of respondents' mothers and fathers had received a third-level qualification of any kind.

Educational Attainment	Father (N=1313)		Mother (N=1315)		
	Ν	%	Ν	%	
Don't know	295	22.5	271	20.6	
Primary school	248	18.9	166	12.6	
Inter. Cert.	311	23.7	309	23.5	
Leaving Cert.	285	21.7	390	29.7	
Third-level Cert./ Diploma	89	6.8	96	7.3	
Degree / Postgraduate	85	6.5	83	6.3	

Table 3.7. Number and percentage of respondents' parents who left education at various stages.

Approximately one respondent in five did not know the highest level of education attained by his/her parents. If "don't know" responses are excluded, 24.4% of fathers had only a primary school education; 30.6% had completed the Intermediate or Group Certificate; 28% had completed the Leaving Certificate; and 17.1% had a

third-level qualification. For mothers, 15.9% had completed primary school only; 29.6% the Intermediate or Group Certificate; 37.4% the Leaving Certificate; and 15.75% had a third-level qualification. Data from the 1996 census indicate that a primary education was the highest level of education obtained by 28.53% of females and 30.56% of males who had left full-time education, while almost 20% (19.5% of males and 19.9% of females) had obtained a third-level qualification (Central Statistics Office, 1998a). Thus, the educational attainment of the respondents' parents is somewhat below that of the general population.

Respondents were asked to state the occupation (or former occupation) of their parents (Table 3.8). Occupations were categorised using the Central Statistics Office (1998b) classification of Social Class on a scale ranging from 1 (highest) to 6 (lowest), with Social Class 7 as a residual category (which includes all who are unemployed or are gainfully employed but whose occupation is unknown or not possible to classify based on the information supplied). Social Class 1 includes professional workers, such as barristers and solicitors, while Social Class 6 includes unskilled workers, such as drivers' mates. Two additions were made to the CSO classification system. As insufficient details (of acreage) were supplied to allow proper classification of farmers, farmers were placed in a separate category. Housewives were also allocated to a separate category.

Social Class	Father		Mot	her
	Ν	%	Ν	%
1. Professional workers	66	5.4	22	1.8
2. Managerial and Technical	182	14.8	189	15.4
3. Non-manual	92	7.5	195	15.8
4. Skilled manual	359	29.3	53	4.3
5. Semi-skilled	114	9.3	99	8.0
6. Unskilled	26	2.1	23	1.9
7. Miscellaneous	204	16.6	104	8.4
8. Farmer	184	15.0	9	0.7
9. Housewife	0.0	0.0	537	43.6

Table 3.8. Number and percentage of respondents' parents categorised by social class.

More than two-fifths (43.6%) of mothers were described as housewives, compared to a national average of 39% in the 1996 census (Central Statistics Office, 1998b). Fifteen percent of fathers were described as farmers. A slightly larger percentage of fathers (20.2%) than of mothers (17.2%) was classified as either Social Class 1 or 2. (Data from the 1996 census indicate that 27.3% of the population are classified as either Social Class 1 or 2).

More mothers were categorised as Social Class 3 (15.8% versus 7.5%) while more fathers were categorised as Social Class 4 (29.3% versus 4.3%). (Nationally, 18.44% of the population was described as Social Class 3 and 20.45% as Social Class 4). Approximately one parent in ten (9.9% of mothers and 11.4% of fathers) was classified as either Social Class 5 or 6 (compared to 21.34% nationally).

Approximately half (47.5%) of mothers were currently employed, as were 81.8% of fathers (Table 3.9). The percentages of fathers (5.4%) and mothers (5.3%) who were unemployed were almost identical. These figures are slightly higher than the national rate of unemployment for the time period during which the survey was carried out (3.7% for both males and females) (Central Statistics Office, 2001). A greater percentage of mothers (39.3%) than of fathers (2.4%) was described as working in the home. Eight percent of fathers and 6.7% of mothers were either retired or on an invalidity pension. A small percentage of respondents described the current employment status of their fathers (2.4%) and mothers (1.2%) as "other". Typically, these parents were deceased.

Employment status	Father		Mother	
	Ν	%	Ν	%
Employed	1054	81.8	616	47.5
Unemployed	70	5.4	69	5.3
Retired/Invalidity pension	103	8.0	87	6.7
Home Duties	31	2.4	509	39.3
Other	31	2.4	15	1.2

Table 3.9. Number and percentage of respondents' parents categorised by employment status.

COLLEGE AND COURSE SELECTION

Respondents were asked to indicate the importance of a series of factors in their decision to enrol at their chosen IT. Location of the college was among the most important factors, with 41.1% of students indicating that location was "important", and only 6.9% saying that it was unimportant (Table 3.10). Responses varied significantly by IT ($\chi^2 = 86.663$, df = 44, p < .01), course type ($\chi^2 = 42.877$, df = 20, p = .002), and gender ($\chi^2 = 13.046$, df = 4, p = .011). For a greater percentage of males than of females, location was either unimportant or not very important in their decision to

enrol at their particular IT (18.4 versus 13.4%). Respondents in Cork (28.7%) and Limerick (27.4%) were least likely to indicate that location was an important factor, while those in Sligo (52.3%) and Letterkenny (50.0%) were most likely to rate it as important. Almost one-fifth of Waterford students said that location was unimportant (see Table C2). Half of Office Information Systems (49.6%) and Electronics (49.6%) students said that location was an important factor, compared to 34.5% of Science and 34.6% of Construction Studies students (see Table C3).

The perception that the college offered the best course in the student's chosen discipline was rated as important by 29.2% of respondents (Table 3.10). However, there are significant differences by IT ($\chi^2 = 77.763$, df = 44, p = .001), course type ($\chi^2 = 61.069$, df = 20, p < .001), and gender ($\chi^2 = 18.463$, df = 4, p = .001).

	Unimp.	Not very imp.	Neutral	Somewhat imp.	Imp.		
Location of the college							
Male (N=641)	9.4	9.0	14.2	26.2	41.2		
Female (N=690)	4.6	8.8	16.5	29.3	40.7		
Total (N=1338)	6.9	8.9	15.4	27.7	41.1		
It offer	ed the best cou	urse in my cl	nosen discij	oline			
Male (N=631)	8.7	10.0	28.7	27.7	24.9		
Female (N=670)	4.6	7.8	26.1	28.4	33.1		
Total (N=1307)	6.6	8.8	27.4	28.1	29.2		
	Academic repu	utation of th	e college				
Male (N=636)	14.8	14.2	34.9	24.5	11.6		
Female (N=682)	8.2	11.7	31.1	28.7	20.2		
Total (1324)	11.3	13.1	32.9	26.7	16.0		
It was the only college that offered this course							
Male (N=630)	54.8	10.5	20.3	6.5	7.9		
Female (N=671)	48.9	12.4	20.1	10.4	8.2		
Total (N=1307)	51.7	11.5	20.2	8.5	8.1		
I had friends starting there							
Male (N=632)	41.3	15.5	17.6	16.3	9.3		
Female (N=683)	43.3	17.0	17.4	15.7	6.6		
Total (N=1315)	42.4	16.3	17.5	16.0	7.9		
Influence or wishes of parents							
Male (N=635)	48.2	16.9	18.6	11.3	5.0		
Female (N=671)	38.3	20.0	20.9	12.8	8.0		
Total (N=1312)	43.1	18.6	19.7	12.0	6.6		

Table 3.10. Percentage of respondents indicating the importance of various factors in their decision to enrol in their selected IT.

The perception that the college offered the best course in the student's chosen discipline was rated as important by 45% of respondents in Cork and 41.3% in Sligo, compared to 20.6% of those attending Letterkenny and Dundalk (see Table C2 for mean rating by college). While 43% of Science students rated it as important, only 22.6% of Business Studies students did (see Table C3). Females (33.1%) were more likely than males (24.9%) to say that the fact that the college offered the best course was an important factor in their choice of IT.

Overall, 16.0% of respondents rated the academic reputation of their IT as an important factor in their college choice, while 11.3% rated it as unimportant (Table 3.10). However, there are significant differences by gender ($\chi^2 = 32.746$, df = 4, p < .001) and by IT ($\chi^2 = 72.626$, df = 44, p = .004). A fifth (21.0%) of respondents in Letterkenny indicated that academic reputation was unimportant in their decision, compared to 6.3% of respondents in Sligo and Tallaght. A greater percentage of females (20.2%) than of males (11.6%) regarded the academic reputation of the college as important.

Just over 8% of students indicated that the fact that only one IT offered their preferred course was an important factor (Table 3.10). Responses varied significantly by college ($\chi^2 = 76.338$, df = 44, p = .002) and course type ($\chi^2 = 48.967$, df = 20, p < .001). While 12.7% of Cork and 12.5% of GMIT-C respondents indicated that this was an important factor, this was true of only 3.2% of Sligo and 3.4% of Carlow students. Computing (16.2%) had the largest percentage of students who said that only one IT offered their preferred course, while Construction Studies (3.1%) had the lowest.

Having friends who planned to attend the college (7.9%) and parental influence (6.6%) were least likely to be rated as important factors in college selection (Table 3.10). However, there are some gender differences with respect to the influence of parental wishes ($\chi^2 = 15.053$, df = 4, p = .005). Males (48.2%) were more likely than females (38.3%) to say that the influence or wishes of parents had been unimportant.

Respondents were asked to indicate the importance of a series of factors in their decision to enrol on their chosen course. Interest in the subject was the factor most frequently rated as important, with 65.3% indicating that it was an important factor in their choice (Table 3.11). There are some statistically significant differences by course type ($\chi^2 = 55.751$, df = 20, p < .001). Science students (83.4%) were most likely to

describe interest in the course as important, while Computing (58.8%) and Electronics (58.9%) students were least likely to do so (see Table C4).

The suggestions of teachers or guidance counsellors were rated as either somewhat important or important in determining choice of course by 26.8% of respondents (Table 3.11). There was some variation by course type, with 31.1% of Office Information Systems and 31.0% of Business Studies students rating it as a somewhat important or important factor, compared to 18.4% of Computing students ($\chi^2 = 31.752$, df = 20, p = .046) (see Table C4). Parental influence (2.4%) or the suggestions of friends (1.8%) were described as important by small minorities of students.

	Unimp.	Not very	Neutral	Somewhat	Imp.
		ımp.		ımp.	
I was interested in the subject (N=1346)	3.3	2.6	6.6	22.1	65.3
Teacher/guidance counsellor suggested this course (N=1323)	42.6	12.1	18.4	19.5	7.3
My parents persuaded me to choose this course (N=1316)	65.0	13.8	13.6	5.1	2.4
My friends suggested this course (N=1316)	60.9	17.2	14.3	5.9	1.8

Table 3.11. Percentage of respondents indicating the importance of various factors in their decision to enrol in their chosen course.

Respondents were presented with a list of sources of information and asked to indicate the importance of each in their decision to enrol on their chosen college and/or course. The college prospectus was the source of information most frequently described as important (Table 3.12). Thirty-seven percent rated it as important, with a further 33.3% rating it as somewhat important. Career exhibitions and open days were considered important by 16% of respondents, the Internet was an important source for 6.5%, while only 2.7% cited newspapers as an important source. There are clear gender differences in how students rated sources of information (Table 3.12). Significantly more females than males described open days ($\chi^2 = 52.581$, df = 4, p < .001), newspapers ($\chi^2 = 17.049$, df = 4, p = .002) and the college prospectus ($\chi^2 = 53.467$, df = 4, p < .001) as important sources.

There are also significant differences by course type on ratings for careers exhibitions or open days ($\chi^2 = 70.482$, df = 20, p < .001) and the college prospectus ($\chi^2 = 50.384$, df = 20, p < .001) (see Table C5). Construction Studies students (8.6%) were least likely to rate careers exhibitions or open days as important sources of
information, while Science students (25.9%) were most likely to. A sizeable percentage of Construction Studies (17.2%) and Electronics (16.4%) students rated the college prospectus as an unimportant source of information, while only 3.3% of Office Information Systems students did.

	Unimp.	Not very imp.	Neutral	Somewhat imp.	Imp.			
	College Prospectus							
Male (N=639)	15.0	7.7	14.4	33.0	29.9			
Female (N=683)	5.3	4.8	12.9	33.2	43.8			
Total (N=1329)	9.9	6.2	13.6	33.3	37.0			
С	areers exhi	bition/open	day					
Male (N=634)	37.2	14.0	20.2	18.1	10.4			
Female (N=686)	24.2	10.2	19.8	24.6	21.1			
Total (N=1327)	30.4	12.2	19.9	21.6	16.0			
	In	ternet						
Male (N=631)	55.5	13.2	16.6	8.9	5.9			
Female (N=675)	50.7	15.3	19.4	7.6	7.1			
Total (N=1313)	52.9	14.4	18.1	8.1	6.5			
Newspaper								
Male (N=628)	58.3	18.0	15.3	5.9	2.5			
Female (N=671)	47.1	21.8	19.7	8.6	2.8			
Total (N=1306)	52.3	20.0	17.6	7.4	2.7			

Table 3.12. Percentages of respondents, by gender, indicating the importance of various sources of information about the college and/or course before they applied

Ratings varied significantly by college for careers exhibitions or open days (χ^2 = 92.373, df = 44, p < .001) and the college prospectus (χ^2 = 90.055, df = 44, p < .001) (see Table C6). Almost half (48.9%) of GMIT-G students rated open days or career exhibitions as unimportant, as against only 18% of students in Carlow. The college prospectus was rated as an unimportant source of information by 15.1% of Athlone students, but by only 2.2% of Carlow students.

Approximately two-thirds (66.3%) of students indicated that the course on which they were enrolled was their first choice on their CAO form. A further 17.8% were enrolled on their second choice course, while 8.7% were enrolled on their third choice course. A small percentage of students (2.7%) indicated that the current course of study was their fourth choice, and 4.5% that it was their fifth or lower choice. Responses varied significantly by college ($\chi^2 = 98.868$, df = 44, p < .001). Waterford had the highest percentage of students (81%) indicating that the course on which they

were enrolled was their first choice (Table 3.13). At least three-quarters of students in GMIT-G, Sligo, Letterkenny, and Cork said they were also enrolled on their first CAO choice. These figures contrast with just over half of students in Limerick (52.6%) and in Tallaght (52.9%) who were enrolled on their first choice course.

	1^{st}	2^{nd}	3 rd	4 th	5^{th} - lower
Athlone (N=173)	65.3	20.2	5.8	4.0	4.6
Carlow (N=90)	67.8	21.1	7.8	1.1	2.2
Cork (N=116)	75.0	17.2	5.2	1.7	0.9
Dundalk (N=174)	62.6	14.9	10.3	4.0	8.0
GMIT-C (N=83)	60.2	19.3	15.7	2.4	2.4
GMIT-G (N=136)	78.7	13.2	6.6	1.5	0.0
Letterkenny (N=63)	76.2	12.7	4.8	1.6	4.8
Limerick (N=95)	52.6	21.1	18.9	2.1	5.3
Sligo (N=65)	78.5	12.3	6.2	1.5	1.5
Tallaght (N=208)	52.9	23.6	9.1	4.3	10.1
Tralee (N=101)	71.3	18.8	5.0	3.0	2.0
Waterford (N=42)	81.0	4.8	11.9	0.0	2.4
Total (N=1346)	66.3	17.8	8.7	2.7	4.5

Table 3.13. Percentage of respondents, by IT, indicating whether the course on which they were enrolled was their first, second, third, fourth, fifth or lower CAO choice.

The percentages of students enrolled on their first choice of course also varied by course of study ($\chi^2 = 47.603$, df = 20, p < .001). Seventy-five percent of Electronics students were enrolled on their first choice, as were 73.1% of Office Information Systems and 69.8% of Computing students. Two-thirds (67.3%) of Science students were enrolled on their first choice course, compared to 61.5% of Construction Studies and 60.4% of Business Studies students. Twelve percent of Business Studies students were enrolled on their fourth or lower choice, compared to 4% of Office Information Systems and Computing students. All Construction Studies students in Waterford indicated that they had obtained their first choice course², while Computing in Limerick (52.2%) and Business Studies in Tallaght (52.8%) had the lowest percentages of students on their first choice course (see Table C7).

A large majority (86.6%) of students indicated that they were attending a thirdlevel institution for the first time. There are no significant gender or course differences, but there are some small differences between ITs ($\chi^2 = 27.683$, df = 11, p =

 $^{^{2}}$ As outlined earlier, results for Construction Studies students in Waterford must be treated with some caution due to the manner in which the questionnaire was administered.

.004). Tralee had the highest percentage of first-time entrants (94.1%) while Limerick had the lowest (76.8%) (Table 3.14).

	Yes	No
Athlone (N=173)	82.1	17.9
Carlow (N=90)	86.7	13.3
Cork (N=115)	81.7	18.3
Dundalk (N=174)	83.9	16.1
GMIT-C (N=83)	90.4	9.6
GMIT-G (N=136)	86.8	13.2
Letterkenny (N=63)	87.3	12.7
Limerick (N=95)	76.8	23.2
Sligo (N=66)	92.4	7.6
Tallaght (N=209)	91.9	8.1
Tralee (N=101)	94.1	5.9
Waterford (N=42)	90.5	9.5
Total (N=1347)	86.6	13.4

Table 3.14. Percentage of respondents, by IT, indicating if they were in their first year in a third-level institution.

Students were asked if they understood what their course would be like before they applied. Given that two-thirds of the students were enrolled in their first choice course, the percentage of students who responded that they had a good prior understanding of their course was very low (11.0%). Gender is significantly related to understanding ($\chi^2 = 15.216$, df = 4, p = .004), with 13.6% of males indicating that they "very much" understood what their course would be like before they applied, compared to 8.6% of females (Table 3.15).

	Very much	Reasonably	Unsure	Not really	Not at all		
Male (N=647)	13.6	47.0	19.8	15.8	3.9		
Female (N=695)	8.6	54.4	15.8	17.8	3.3		
Total (N=1349)	11.0	50.9	17.7	16.8	3.6		

Table 3.15. Percentage of respondents, by gender, indicating their level of understanding of what their course would be like prior to applying.

Just over half (54.8%) of students indicated that they had received some form of help or guidance with their choice of course. A greater percentage of females (58.8%) than of males (50.7%) reported having received help ($\chi^2 = 8.535$, df = 1, p = .003). Those who had received guidance indicated that they had a greater knowledge

than those who had received no guidance of what their course involved before they started (t = -4.71, df = 1171, p < .001). Among those who had received help and who indicated from whom they had predominantly received it, 64.5% cited guidance counsellors. The other main sources of guidance were parents (9.8%), family members (9.2%), and friends (9.0%).

Almost two-thirds (63.7%) of respondents indicated that the highest qualification they wished to obtain was a degree, with a further 9.5% saying that they would like to obtain a postgraduate qualification. While 17.6% said that a National Diploma was the highest qualification they wanted to obtain, only 8.5% indicated that they aspired to achieve a National Certificate. Course of study was related to educational aspirations ($\chi^2 = 164.979$, df = 20, p = <.001). Science and Business Studies had the greatest percentage of students (83.7%) hoping to attain a degree or postgraduate qualification. Office Information Systems was the only course where none of the respondents wanted a postgraduate qualification; it also had the smallest percentage (47.6%) hoping to obtain a degree.

Table 3.16. Percentage of respondents, by course, indicating various levels of educational aspirations.

	N. Cert.	N. Dip.	Degree	PG	Other
Business Studies (N=474)	6.5	8.9	71.7	12.0	0.8
Computing (N=194)	6.7	13.4	69.6	9.8	0.5
Construction Studies (N=126)	6.3	26.2	60.3	6.3	0.8
Electronics (N=108)	9.3	28.7	53.7	8.3	0.0
Office Information Systems (N=223)	18.9	32.2	47.6	0.0	1.3
Science (N=165)	2.4	13.3	65.5	18.2	0.6
Total (N=1300)	8.5	17.6	63.7	9.5	0.8

There are some differences by college. However, these are largely associated with course type. Thus, colleges where selected courses include Office Information Systems (Carlow, Dundalk, Sligo, and Tralee) tended to have a higher than average percentage of students aspiring to only a National Certificate. Males had slightly higher educational aspirations than females ($\chi^2 = 13.181$, df = 4, p = .01). However, when analysed by course type, there are no gender differences in the educational aspirations of Science, Business Studies, Computing, or Electronics students. There are significant gender differences among Office Information Systems students ($\chi^2 = 18.65$, df = 3, p < .001), with a larger percentage of females than of males aspiring to

National Certificates and degrees, and a larger percentage of males aspiring to National Diplomas and "other" qualifications.

EXPERIENCE OF COLLEGE

The questionnaire contained a series of questions about respondents' experience of college life, including satisfaction with the course and college; the degree of concordance between their expectations and their experiences; attendance; and whether or not they had ever considered leaving their course.

Most students (62.6%) indicated that their college experience had met their expectations. For one quarter (25.3%), their college experience was better than their expectations, while for 12.1% it was worse. There are no gender or course differences, but there is some variation by college ($\chi^2 = 40.490$, df = 22, p = .009). For example, while almost one respondent in five in Cork and Letterkenny described his/her experience as worse than expected, less than one in twelve did so in Waterford, Sligo, and Tralee (Table 3.17). Examining course-college interactions, Construction Studies students in GMIT-C were most likely to describe their experience as worse than expected (28.6%), while at the other extreme, none of the Waterford Construction Studies students did so (see Table C8).

	Worse than expected	As expected	Better than expected
Athlone (N=173)	9.2	65.9	24.9
Carlow (N=89)	16.9	68.5	14.6
Cork (N=115)	19.1	66.1	14.8
Dundalk (N=174)	10.9	63.8	25.3
GMIT-C (N=83)	15.7	60.2	24.1
GMIT-G (N=137)	9.5	63.5	27.0
Letterkenny (N=63)	19.0	52.4	28.6
Limerick (N=96)	18.8	60.4	20.8
Sligo (N=65)	7.7	60.0	32.3
Tallaght (N=210)	9.0	58.1	32.9
Tralee (N=101)	7.9	63.4	28.7
Waterford (N=42)	7.1	69.0	23.8
Total (N=1348)	12.1	62.6	25.3

Table 3.17. Percentage of respondents, by IT, describing how their college experience compared to their expectations.

Many students indicated that their course workload was not what they had expected. For approximately one-third (32.3%), it was greater than they had imagined

prior to enrolling in the course, while 12.5% said that they had less work to do than they had expected. Students' perceptions of their workload are significantly related to course of study ($\chi^2 = 82.045$, df = 10, p < .001). Electronics had the largest percentage of students (55.8%) describing their workload as more than they had expected, followed by Science (42%) and Computing (41.7%). Business Studies (21.3%) and Office Information Systems (29.1%) students were least likely to describe their workload as unexpectedly heavy.

Apart from differences between types of courses, there was also considerable variation between colleges for the same course type (see Table C9). Construction Studies was the course where differences between colleges were most apparent. For example, while only 10% of Waterford students reported that their workload was heavier than expected, for GMIT-C students the figure was 71.4%. Over half (55.3%) of Science students in Cork said that their workload was more than expected, compared to only 22.6% of Science students in Tallaght. Among Computing students, 64.3% in Waterford, but only 22.6% in GMIT-C, described their workload as heavier than expected. For Office Information Systems, 42.6% of Carlow students reported a heavier than expected workload, compared to only 10.4% of Sligo students. There were no major inter-college differences in the ratings given by Electronics students, with at least half the students in all colleges reporting an unexpectedly heavy workload.

A small minority (5.9%) of students said that they had great difficulty with their course work, while the majority (74.8%) reported some difficulties. The degree of difficulty experienced was related to course type ($\chi^2 = 45.518$, df = 10, p < .001) (Table 3.18).

	No difficulty	Some difficulty	Great difficulty
Business Studies (N=493)	25.8	70.8	3.4
Computing (N=198)	16.2	72.7	11.1
Construction Studies (N=131)	20.6	77.1	2.3
Electronics (N=113)	14.2	79.6	6.2
Office Information Systems (N=243)	14.0	81.1	4.9
Science (N=169)	14.8	74.6	10.7
Total (1347)	19.4	74.8	5.9

Table 3.18. Percentage of respondents, by course, indicating the level of difficulty they had with their course work.

Computing had the largest percentage of students reporting great difficulty (11.1%), while Construction Studies had the smallest (2.3%). Males were more likely than females to report that they had no difficulty (22.9% versus 16.0%) ($\chi^2 = 15.561$, df = 2, p < .001).

Half (49.9%) of respondents said that they had difficulty with their course because they had not taken certain subjects in school. Responses varied significantly by course type ($\chi^2 = 62.93$, df = 5, p < .001). Science was the course in which students were most likely to have difficulty because they had not taken a subject in school (70.8%) while Computing students were least likely to indicate that this was a problem (33.8%) (Table 3.19).

	Ν	%
Business Studies (N=492)	266	54.1
Computing (N=198)	67	33.8
Construction Studies (N=130)	65	50.0
Electronics (N=113)	41	36.3
Office Information Systems (N=244)	113	46.3
Science (N=168)	119	70.8
Total (N=1345)	305	47.4

Table 3.19. Number and percentage of respondents, by course, indicating that they had trouble with their course because they did not take certain subjects in school.

With the exception of Electronics, there are no significant gender differences. Two-thirds (66.7%) of female Electronics students, but only one-third (33.7%) of their male counterparts, reported difficulty with course work due to not having taken certain subjects at school. However, there were only nine female Electronics students in the study.

A minority (29.6%) of students had attended all their classes in the week before they were surveyed. There are significant differences between course types ($\chi^2 =$ 55.16, df = 5, p < .001); Business Studies students had the lowest rate of full attendance (19.9%), while Electronics (47.7%) and Construction Studies (43.5%) had the highest.

Of those who had missed classes, two-thirds said that they had missed less than 25%, while approximately one in ten students had missed more than 76% (Table 3.20). While there are no significant differences in the percentage of males and females who had attended all classes in the week prior to the survey, males who missed classes tended to miss a greater percentage ($\chi^2 = 10.192$, df = 3, p = .017).

~	<25%	26-50%	51-75%	76%+
Male (N=429)	63.4	15.2	9.1	12.4
Female (N=505)	68.9	17.4	6.3	7.3
Total (N=939)	66.6	16.3	7.6	9.6

Table 3.20. Percentage of respondents, by gender, indicating the percentage of classes they had missed in the week prior to being surveyed.

The reason most frequently offered by students for missing classes was illness or a medical appointment (25.8%), followed by tiredness, oversleeping or laziness (25.1%) (Table 3.21). Transport difficulties were blamed by 12.2% of students, while 7.4% said that they had not attended because of a dislike of or lack of interest in either the subject or the particular lecturer. Other common reasons cited included having a hangover or being out late the previous night (6.4%), a badly organised timetable (4%), and work commitments (3.5%) or sports (3.3%).

Table 3.21. Number and percentage of respondents who missed classes offering various reasons for so doing.

	Ν	%
Illness/medical appointment	244	25.8
Overslept/lazy/tired	237	25.1
Transportation difficulties	115	12.2
No interest/didn't want to go/didn't like subject/lecturer	70	7.4
Socialising night before/hangover	61	6.4
Timetable difficulties/long breaks/no breaks	38	4.0
Work	33	3.5
Sport commitment	31	3.3
Other	156	16.5

The frequency with which specific reasons were offered varied between colleges (see Table C10). For example, 22.8% of respondents in Tallaght said that they had missed a class in the previous week due to transportation problems, whereas none of the respondents in Waterford mentioned such problems. Transport was the reason most frequently cited by Tallaght students. While 39.3% of Carlow students and 36.8% of Athlone students had missed a class due to illness, this was true of only 13.5% of Sligo students. Timetable problems (too many classes without a break, or too large a gap between classes) were cited by 7.2% of Tralee students but by nobody in Waterford or in either of the GMIT campuses. A dislike of the subject or lecturer, or general lack of interest in the topic, was given as a reason by 16.7% of students in Letterkenny and Cork, but by nobody in Waterford.

Students were asked approximately how many hours they spent on course work in a typical week, excluding class time. Surprisingly, 41.8% reported that they spent five hours or less a week studying, while 37.7% said that they spent between 6 and 10 hours (Table 3.22). There were no significant gender differences in the amount of time devoted to study. However, there was some variation by age group ($\chi^2 = 31.075 \ df =$ 12, p = .002) and course type ($\chi^2 = 60.127 \ df = 30$, p = .001). While over two-fifths of students aged 17-18 (43.5%) and 19-20 (43.0%) said that they spent five hours or less a week studying, this was true of only 26.5% of students aged 21 or more. The amount of out-of-class work was also related to course type. One-third of Science and Electronics students indicated that they spent five hours or less a week studying, compared to almost 40% of Office Information Systems (39.9%) and Construction Studies (39.8%) students (see Table C11). Business Studies (46.6%) and Computing (45.2%) had the highest proportion of students indicating that they spent five hours or less per week engaged in out-of-class work.

	17-18 years	19-20 years	21+ years	Total
	(N=653)	(N= 565)	(N=113)	(N=1331)
0 - 5 hours	43.5	43.0	26.5	41.8
6-10 hours	38.6	36.8	37.2	37.7
11-15 hours	9.5	8.5	17.7	9.8
16-20 hours	3.4	4.2	6.2	4.0
21-25 hours	2.0	2.7	2.7	2.3
26-30 hours	2.0	3.0	8.0	2.9
30+ hours	1.1	1.8	1.8	1.4

Table 3.22. Percentage of respondents, by age, indicating the number of hours they spent on course work, excluding class time, in a typical week.

Three-quarters (75.5%) of respondents were glad to be attending their chosen college (Table 3.23). Sligo students expressed the greatest level of satisfaction, with 9 out of 10 students indicating that they either agreed or strongly agreed that they were glad to be attending Sligo (see Table C12 for mean agreement ratings by college). Over four-fifths of Waterford (88.1%) and Tallaght (81.3%) students also agreed or strongly agreed that they were glad to be attending their respective colleges. At the other extreme, slightly less than two-thirds of students attending Letterkenny (63.5%), GMIT-C (63.8%), and Limerick (65.2%) said that they were glad to be attending their respective colleges.

females (32.5%) than of males (25.5%) strongly agreeing that they were glad to be attending their particular college ($\chi^2 = 10.664$, df = 4, p = .031).

Half (50.3%) of those surveyed agreed or strongly agreed that they would rather be at college than anywhere else, while 60% agreed that they could relate course material to their career goals (Table 3.23). Being able to relate course material to career goals was significantly related to course type ($\chi^2 = 31.840$, df = 20, p = .045). Construction Studies had the largest percentage of respondents (71.0%) who agreed or strongly agreed with this statement, while Computing had the lowest percentage (51.5%) (see Table C13 for mean agreement ratings, by course).

Seventy-two percent of students agreed or strongly agreed that they were glad to be enrolled on the course they were following, and 77.9% that they were interested in the course (Table 3.23). Interest in course varied significantly by course type ($\chi^2 = 44.571$, df = 20, p = .001) (see Table C13). Science students were most interested, with 87.4% either agreeing or strongly agreeing that they were very interested, while Business Studies students were least interested (72.9% agreed or strongly agreed that this was so).

	S. disagree	Disagree	Neutral	Agree	S. agree
I'm glad I'm attending this	1.5	3.6	19.3	46.3	29.2
college (N=1345)					
I would rather be at college	7.0	13.0	29.6	26.6	23.7
than anything else (N=1337)			_ > • •		
I can relate course material to	3.4	6.2	30.4	40.1	19.9
my career goals (N=1331)		••-			- / • /
I'm glad I'm enrolled on this	1.5	5.2	21.3	44.6	27.4
course (N=1338)					
I am interested in my course	16	31	174	47.0	30.9
(N=1341)	1.0	2.1		.,	2 0.9

Table 3.23. Percentage of respondents indicating various levels of agreement with statements about their satisfaction with course and college choice.

Smaller percentages of respondents agreed or strongly agreed that their family (46.1%) and friends (33.7%) encouraged them to stay at college. Indeed, almost one-third (32.0%) disagreed or strongly disagreed that their friends encouraged them to stay at college, while one-quarter (25.6%) disagreed or strongly disagreed that their parents encouraged them to stay. A smaller percentage of males (40.9%) than of females (51.0%) agreed or strongly agreed that their family encouraged them to stay in college ($\chi^2 = 19.293$, df = 4, p = .001) (Table 3.24). Males (24.7%) were also less likely than females (41.9%) to agree or strongly agree that their friends encouraged them to stay ($\chi^2 = 50.972$, df = 4, p < .001).

with statements acout encot	nugement non	i luiilij uilu	menus to r		entege.
	S. disagree	Disagree	Neutral	Agree	S. agree
My fa	amily encourag	e me to stay	v at this IT		
Males (N=641)	15.9	13.1	30.1	22.5	18.4
Females (N=689)	9.7	12.8	26.6	26.6	24.4
Total (N=1337)	12.7	12.9	28.2	24.5	21.6
My fr	iends encourag	ge me to stay	y at this IT		
Males (N=633)	19.4	17.7	38.2	17.1	7.6
Females (N=687)	11.1	16.2	30.9	27.2	14.7
Total (N=1327)	15.1	16.9	34.4	22.5	11.2

Table 3.24. Percentage of respondents, by gender, indicating various levels of agreement with statements about encouragement from family and friends to remain in college.

Just over one-third (35.7%) of respondents agreed or strongly agreed that they had felt "lost" when they first came to college, while a smaller percentage (9.8%) agreed or strongly agreed that they still felt lonely and without friends (Table 3.25).

Table 3.25. Percentage of re	espondents, by	gender, ind	icating vario	ous levels of	10
agreement with statements a	bout feelings c	of initial or c	urrent isola	tion in coll	ege.

	S. disagree	Disagree	Neutral	Agree	S. agree
I fel	t "lost" when I	first came to	o college		
Males (N=634)	18.9	27.9	22.2	19.7	11.2
Females (N=689)	17.6	23.1	19.2	18.6	21.6
Total (N=1330)	18.2	25.3	20.8	19.1	16.6
]	feel lonely and	d without fr	iends		
Males (N=635)	55.1	24.3	13.2	3.8	3.6
Females (N=688)	57.3	19.5	11.2	6.8	5.2
Total (N=1330)	56.2	21.7	12.2	5.4	4.4

The extent of initially feeling "lost" varied by college ($\chi^2 = 63.008$, df = 44, p = .031). Whereas 44.6% of students in Tralee agreed or strongly agreed that they had this feeling, the figure for Letterkenny students was only 23.8% (see Table C12). Responses also differed significantly by gender, with females more likely to admit feeling isolated, either initially ($\chi^2 = 26.715$, df = 4, p < .001) or at the time of the survey ($\chi^2 = 12.507$, df = 4, p = .014).

COURSE ORGANISATION

Satisfaction with the number of scheduled hours was related to course of study ($\chi^2 = 137.707$, df = 10, p < .001). Although an average of 33.6% of the total sample believed they had too many scheduled class hours, 61.1% of Electronics students believed this to be the case (Table 3.26). When courses in individual colleges are

considered, Construction Studies in GMIT-C (78.6%) and Electronics in GMIT-G (78.3%) had the largest percentages of students indicating that they had too many scheduled hours. Most courses had few or no students who said that they had too few scheduled classes. Construction Studies students in Limerick were the exception, as 42.9% believed they had too few scheduled classes (see Table C14).

	Too many	Just right	Too few
Business Studies (N=491)	21.2	74.5	4.3
Computing (N=197)	37.6	59.9	2.5
Construction Studies (N=130)	32.3	51.5	16.2
Electronics (N=113)	61.1	38.1	0.9
Office Information Systems (N=242)	38.0	60.7	1.2
Science (N=168)	41.7	56.5	1.8
Total (N=1341)	33.6	62.3	4.0

Table 3.26. Percentage of respondents, by course, indicating whether they thought that the number of scheduled class hours was too much, just right or too few.

Only 6.3% of all respondents were very satisfied with how their timetable was organised, while 65.8% were satisfied and 27.9% were not at all satisfied. Satisfaction was significantly related to course type ($\chi^2 = 32.049$, df = 10, p < .001), with Business Studies having the greatest percentage of students (34.6%) indicating that they were not at all satisfied. However, this was largely due to Tallaght Business Studies students, 59.6% of whom were not at all satisfied. Satisfaction varied considerably between courses and colleges. Construction Studies in Waterford (0%), Science in Athlone (8%) and Dundalk Office Information Systems (8.9%) had the lowest percentages of students indicating that they were not at all satisfied with their timetable (see Table C15).

Most students (68.5%) indicated that they were informed of all timetable changes, while 25.9% felt that they were not, and 5.6% indicated that the question was not applicable to them. Again, there was considerable variation across courses. Construction Studies in Limerick had the highest percentage of students (65.3%) indicating that they were not informed of all timetable changes. At least half of Science students in Athlone, Business Studies students in Tallaght, and Electronics students in Waterford and GMIT-C also said that they were not informed of all changes (see Table C16). Respondents were asked if they were given adequate information to get to a new classroom when changes were made to a class location. One-third (34.8%) agreed that they were, 54.5% disagreed, and 10.7% indicated that the question was not relevant. Electronics in Waterford (11.1%) and Business Studies in Tallaght (11.2%) had the lowest percentages of students who said that they were given adequate information, while Electronics in Sligo (83.3%) had the highest (see Table C17).

SOURCES OF FINANCIAL AID

Two-thirds (66.7%) of respondents had a paid job (Table 3.27), slightly more females (70.1%) than males (63.2%). Course of study was significantly related to employment ($\chi^2 = 26.605$, df = 5, p < .001). Business Studies had the largest percentage of students (74.2%) in paid employment, while Electronics (58.4%) and Construction Studies (57.3%) had the lowest.

paid job.		
	Yes	No
Business Studies (N=492)	74.2	25.8
Computing (N=200)	62.0	38.0
Construction Studies (N=131)	57.3	42.7
Electronics (N=113)	58.4	41.6

Office Information Systems (N=244)

Science (N=169)

Total (N=1349)

Table 3.27. Percentage of respondents, by course, indicating whether or not they had a paid job.

64.8

66.3

66.7

35.2

33.7

33.3

Those who were employed were asked if their job interfered with their studies. Just over half (56.5%) believed that it did not, 38.6% thought it did a little, while only 4.9% believed it interfered a lot. A large majority (88.3%) indicated that their job was unrelated to their course of study, although responses varied significantly by field of study ($\chi^2 = 64.617$, df = 5, p < .001). Whereas 34.2% of Construction Studies students, 15.6% of Business Studies students, and 7.6% of Office Information Systems students had a job related to their field of study, less than 3% of Science or Computing students had (Table 3.28).

	Yes	No
Business Studies (N=360)	15.6	84.4
Computing (N=123)	2.4	97.6
Construction Studies (N=73)	34.2	65.8
Electronics (N=64)	9.4	90.6
Office Information Systems (N=157)	7.6	92.4
Science (N=111)	1.8	98.2
Total (N=888)	11.7	88.3

Table 3.28. Percentage of respondents in employment, by course type, indicating if their job was related to their course.

When asked if they worked during timetabled hours, 83.9% said that they did not, 14.6% that they did occasionally, and 1.5% that they did frequently. Respondents were asked how many hours per week they worked, both on- and off-campus. Just over one-third (35.4%) of those who had a paid job did not indicate how many hours they worked, either on- or off-campus. Of the remainder, 22.2% worked on-campus, averaging 16.15 hours per week, while 98.3% worked off -campus hours, averaging 16.1 hours weekly. Combining on- and off-campus hours worked, the average hours worked per week was 19.41 (Table 3.29). Forty students (6.5% of those in employment) worked more than 40 hours a week, with one claiming to work 84 hours a week! Only 5% of those who claimed to be employed for 40 or more hours per week believed that their job interfered a lot with their study. It is possible that at least some respondents misinterpreted "work" to refer to study *and* paid employment, thereby inflating the number of hours. Consequently, the mean number of hours worked may be lower than the data suggest.

Table 3.29.	Mean number of hours	worked by resp	ondents, on-	and off-campus	s, and
in total.					

	Mean	SD
On-campus (N=129)	16.15	10.45
Off-campus (N=571)	16.10	7.50
Total on- & off-campus (N=581)	19.41	11.48

Respondents were asked how important each of a series of sources of finance was to them in meeting their college expenses. Parental or family assistance was identified as a major source of financial assistance by 47.2% of respondents, while 45.5% identified personal savings or income. Almost one-third (32.7%) identified

their grant as a major source of assistance, while all other forms of assistance were considered as a major source by less than 9% of respondents (Table 3.30).

	ting now un	ej met met	i eomege e	Apended.
	Major	Minor	No	N/A
	support	support	support	
Parental or other family assistance (N=1244)	47.2	39.7	12.0	1.1
Personal savings/income (N=1221)	45.5	36.3	15.5	2.7
Grant (N=1212)	32.7	16.5	30.5	20.3
Employer pays fees (N=1108)	8.7	7.4	46.4	37.5
Loan (N=1093)	3.7	3.5	57.7	35.1
Scholarship (N=1070)	0.9	1.1	56.3	41.7

Table 3.30. Percentage of respondents indicating how they met their college expenses.

Almost half (45.9%) of respondents strongly agreed that college cost more than they had expected, while a further 25.8% agreed with the statement. While 26.0% of respondents either agreed or strongly agreed that accommodation costs were higher than they had expected, when those for whom the question was not applicable were excluded, the percentage rose to 44.2%. Excluding the 43.3% who indicated that the statement was not applicable, only 3.6% strongly agreed that their grant was sufficient, while 34.4% strongly disagreed. When asked if they did not budget their money as well as they could, 41.1% either agreed or strongly agreed, while 34.6% either disagreed or strongly disagreed (Table 3.31).

Table 3.31. Percentage of respondents indicating various levels of agreement with a number of statements regarding finance.

	S. disagree	Disagree	Neutral	Agree	S. agree	N/A
College costs more than I expected (N=1332)	3.5	7.5	17.4	25.8	45.9	0.0
Accommodation costs more than I expected (N=1298)	5.2	8.6	19.0	13.4	12.6	41.3
My grant is sufficient (N=1295)	34.4	9.9	6.6	2.2	3.6	43.3
I do not budget my money as well as I could (N=1329)	14.1	20.5	24.2	24.8	16.3	0.0

SATISFACTION WITH COLLEGE

Respondents were asked if they felt that they had been given a good introduction to specific aspects of college life (such as the course staff, the library, and student clubs) when they first enrolled in college. Just over three-quarters (77.4%) agreed that they were given a good introduction to their Student Union, while 72.6% of Science students agreed that they were given a good introduction to Science labs. Between 65-

68% of students agreed that they had received a good introduction to their course staff, library services, student clubs, and college chaplain. Slightly fewer felt they had been given a good introduction to health services (64.2%) and computer labs (61.1%), while 52.5% felt this was the case for the college counsellor. In contrast, only 31.8% agreed that they had been given a good introduction to their classmates (Table 3.32).

	Yes	No	N/A
Student union (N=1344)	77.4	21.8	0.8
Science labs (N=168)	70.8	26.8	2.4
Course staff (N=1344)	67.7	31.3	1.0
Student clubs (N=1341)	65.9	32.3	1.8
Library services (N=1344)	65.8	33.3	0.9
College chaplain (N=1340)	65.1	32.8	2.2
Health services (N=1341)	64.2	34.4	1.4
Computer labs (N=1342)	61.1	36.1	2.8
College counsellor (N=1341)	52.5	45.0	2.5
Students on your course (N=1344)	31.8	66.3	1.9

Table 3.32. Percentage of respondents indicating whether or not they felt that they had been given a good introduction to various aspects of college life.

"Not applicable" answers were removed, and responses were compared by college (Table 3.33 (parts 1 and 2)). With the exception of the introduction given to Science laboratories (rated by Science students only), significant differences emerged on all aspects. There were large differences between colleges in the proportion who agreed that they were given a good introduction to fellow students ($\chi^2 = 60.877$, df = 11, p < .001), course staff ($\chi^2 = 110.984$, df = 11, p < .001), library services ($\chi^2 = 156.385$, df = 11, p < .001), health services ($\chi^2 = 97.466$, df = 11, p < .001), computer laboratories ($\chi^2 = 115.794$, df = 11, p < .001), student clubs ($\chi^2 = 100.693$, df = 11, p < .001), the college counsellor ($\chi^2 = 139.474$, df = 11, p < .001), the student union ($\chi^2 = 51.492$, df = 11, p < .001), and the college chaplain ($\chi^2 = 152.178$, df = 11, p < .001).

Table 3.33 (Part 1). Percentage of respondents (excluding 'not applicable' responses), by IT, reporting that they were given a good introduction to

various aspects of	t college lite	e wnen uney	III SI CAIIIE IC) college.						
	Fellow	students	Cours	e staff	Library	Services	Health S	Services	Science	ce Labs
	Ν	% Yes	N	% Yes	N	% Yes	Z	% Yes	N^3	% Yes
Athlone	167	24.6	167	82.6	168	73.8	167	88.0	23	82.6
Carlow	89	19.1	06	68.9	06	60.0	60	63.3	28	67.9
Cork	115	34.8	116	58.6	115	36.5	115	46.1	84	70.2
Dundalk	169	39.1	170	62.4	171	87.1	169	68.6	T	I
GMIT-C	78	46.2	80	85.0	81	95.1	77	40.3	-	I
GMIT-G	134	26.1	136	66.9	134	61.2	135	65.2	I	I
Letterkenny	62	35.5	63	82.5	63	77.8	62	72.6	ı	I
Limerick	94	23.4	56	82.1	96	82.3	95	75.8	-	I
Sligo	63	46.0	65	86.2	64	62.5	64	70.3	I	I
Tallaght	206	28.6	207	45.9	208	52.4	208	63.5	29	75.9
Tralee	100	32.0	100	62.0	100	58.0	67	58.2	T	I
Waterford	42	69.0	42	81.0	42	52.4	42	42.9	-	I
Total	1319	32.4	1331	68.4	1332	66.4	1321	65.1	164	72.6

³ N=number of Science students surveyed in a college.

Table 3.33 (Part 2) Numbers and percentage of respondents (excluding 'not applicable' responses), by IT, reporting that they were given a good

introduction to va	irious aspeci	ts of college	life when the	ney mest can	ne to college					
	Compu	iter labs	Studen	t Clubs	Coun	sellor	Student	t Union	Cha	plain
	Z	% Yes	Z	% Yes	Z	% Yes	Z	% Yes	Ν	% Yes
Athlone	161	41.0	168	74.4	168	76.8	168	80.4	168	79.8
Carlow	89	70.8	06	87.8	06	52.2	06	84.4	87	59.8
Cork	115	64.3	116	73.3	115	28.7	116	69.8	113	32.7
Dundalk	166	71.1	167	55.1	167	43.7	169	75.1	168	69.6
GMIT-C	80	81.3	80	81.3	62	7.9.7	82	95.1	76	75.0
GMIT-G	135	74.1	133	58.6	133	63.2	135	68.9	134	67.9
Letterkenny	60	56.7	60	43.3	60	33.3	63	73.0	62	51.6
Limerick	94	55.3	94	43.6	92	72.8	96	72.9	96	85.4
Sligo	65	84.6	65	86.2	59	49.2	65	93.8	63	93.7
Tallaght	200	45.5	205	64.4	205	51.7	206	76.2	203	69.5
Tralee	86	80.6	98	75.5	67	43.3	101	88.1	66	59.6
Waterford	42	54.8	41	75.6	42	26.2	42	64.3	42	26.2
Total	1305	62.8	1317	67.1	1307	53.9	1333	78.0	1311	66.5

Waterford was the only college where more than half the respondents (69%) agreed that they had been given a good introduction to their fellow students. In contrast, less than one-quarter of students attending Athlone, Limerick, and Carlow agreed. Sligo (86.2%) and GMIT-C (85%) had the highest percentages of students who agreed that they had been given a good introduction to course staff, while Tallaght was the only college where less than half (45.9%) of respondents agreed that this had been the case.

Satisfaction with the introduction to library services was reasonably high overall. In all colleges except Cork (36.5%), at least half of the respondents agreed that they had received a good introduction to the service. GMIT-C had a particularly high percentage of students (95.1%) who were satisfied with their introduction. Athlone had the highest percentage of respondents (88%) expressing satisfaction with their introduction to college health services, while in Cork (46.1%), Waterford (42.9%) and GMIT-C (40.3%) less than half of respondents indicated that they were satisfied. Among Science students, there was no significant variation between colleges in level of satisfaction with the introduction given to Science labs.

The percentage of respondents who agreed that they were given a good introduction to computer laboratories was highest in Sligo (84.6%) and lowest in Athlone (41%). Carlow had the highest percentage of respondents expressing satisfaction with their introduction to student clubs (87.8%) while less than half the respondents in Limerick (43.6%) and Letterkenny (43.3%) were satisfied. Over three-quarters of GMIT-C (79.7%) and Athlone (76.8%) students agreed that they were given a good introduction to the college counsellor, compared to 28.7% of Cork and 26.2% of Waterford students.

Over two-thirds of students in all colleges, with the exception of Waterford (64.3%) agreed that they were given a good introduction to the Student Union. GMIT-C had the largest percentage of respondents (95.1%) who were satisfied with their introduction to the Student Union. The percentage of respondents who agreed that they received a good introduction to the college chaplain was highest in Sligo (93.7%) and lowest in Waterford (26.2%).

Overall, GMIT-C and Sligo students appeared most satisfied with their college induction. On six items students in GMIT-C either had the highest or second highest percentage of students who agreed that they were given a good introduction to the item in question (library, college counsellor, Student Union, course staff, students on their

course, and computer labs). Similarly, on five items, Sligo students either had the highest or second highest percentage of students agreeing that they were given a good introduction to the item in question (course staff, computer labs, college chaplain, student clubs, and Student Union). In contrast, Waterford students appeared least happy with their introduction to college. On five of the nine items, they had either the lowest or second lowest percentage of respondents agreeing that they were given a good introduction to the item in question (college counsellor, Student Union, college chaplain, library and health services). Respondents were also asked about their current level of satisfaction with aspects of college life. Specifically, they were asked how satisfied they were with particular aspects of each of the following: teaching staff, lectures, tutorials, computer facilities, laboratory facilities, library facilities, canteen facilities, and student facilities. Just over half were either satisfied or very satisfied with the availability (53.3%), enthusiasm (56.1%), and approachability (57.6%) of teaching staff (Table 3.34). Smaller percentages were dissatisfied or very dissatisfied with their availability (10.5%), enthusiasm (13.5%), and approachability (15.4%). A majority were also satisfied or very satisfied with the reliability of teaching staff (61.2%) and the overall quality of instruction offered (64.8%).

 Table 3.34. Percentage of respondents expressing various levels of satisfaction with teaching staff.

	V. dissat.	Dissat.	Neutral	Sat.	V. sat.
Availability (N=1337)	3.2	7.3	36.3	39.5	13.8
Enthusiasm (N=1335)	3.6	9.9	30.3	41.0	15.1
Approachability (N=1335)	4.9	10.5	27.1	40.1	17.5
Reliability (N=1335)	3.0	8.2	27.6	45.2	16.0
Quality of instruction (N=1335)	2.6	4.8	27.9	48.2	16.6

Majorities of students expressed satisfaction with number of lectures, size of groups, and quality of rooms. Eleven percent expressed at least some dissatisfaction with the number of lectures on their course, while 7.7% were either very dissatisfied or dissatisfied with the size of their lecture groups (Table 3.35). Sixteen percent were dissatisfied or very dissatisfied with the quality of lecture rooms.

 Table 3.35. Percentage of respondents expressing various levels of satisfaction with aspects of their lectures.

Lectures	V. dissat.	Dissat.	Neutral	Sat.	V. sat.
Number of lectures (N=1337)	3.7	7.3	27.7	46.7	14.6
Size of group (N=1340)	2.1	5.6	22.5	50.3	19.6
Quality of rooms (N=1338)	4.3	11.7	24.7	42.9	16.5

Respondents were less satisfied with tutorials. Almost one-third (31.7%) were either dissatisfied or very dissatisfied with the number, while smaller percentages expressed dissatisfaction with their usefulness (14.5%) and with the quality of the classroom (13.9%) (Table 3.36).

Table 3.36. Percentage of respondents expressing various levels of satisfaction with aspects of their tutorials.

Tutorials	V. dissat.	Dissat.	Neutral	Sat.	V. sat.	N/A
Number (N=1316)	13.5	18.2	24.7	25.1	6.3	12.2
Usefulness (N=1314)	5.9	8.6	22.9	33.0	15.4	14.2
Quality of classroom (N=1318)	5.3	8.6	28.5	33.7	10.8	13.1

One-third (33.2%) of students indicated at least some dissatisfaction with their level of access to computer laboratories, while 41.2% were dissatisfied with the number of computers available (Table 3.37). Smaller percentages expressed some dissatisfaction with the modernity of computer equipment or software (14.7%) and with the quality of computer laboratories (10.4%).

Table 3.37. Percentage of respondents expressing various levels of satisfaction with aspects of their computer facilities.

Computer facilities	V. dissat.	Dissat.	Neutral	Sat.	V. sat.	N/A
Access to labs (N=1341)	12.5	20.7	15.4	29.9	20.6	0.8
Availability (N=1337)	15.0	26.2	17.4	25.4	15.5	0.7
Modernity (N=1333)	5.6	9.1	18.5	38.0	27.7	1.1
Room quality (N=1336)	4.0	6.4	18.0	40.8	29.8	1.0

The majority of respondents were satisfied with the laboratory facilities offered by their college (Table 3.38). Only 7.7% were either very dissatisfied or dissatisfied with the usefulness of laboratory sessions, while only 6.8% criticised the quality of the laboratories. A slightly larger percentage (13.4%) was dissatisfied with the number of laboratory sessions offered.

Table 3.38. Percentage of respondents expressing various levels of satisfaction with aspects of their laboratory facilities.

Lab facilities	V. dissat.	Dissat.	Neutral	Sat.	V. sat.	N/A
Number of sessions (N=1276)	6.0	7.4	17.2	25.5	10.2	33.8
Usefulness (N=1272)	3.4	4.3	14.9	27.4	15.6	34.4
Quality of labs (N=1269)	2.9	3.9	16.5	26.7	15.8	34.1

A majority (63.8%) of students were satisfied or very satisfied with the adequacy of library facilities in their colleges, while 12.5% were dissatisfied or very dissatisfied (Table 3.39). Most (69.7%) were also satisfied or very satisfied with the quality of the library building, although a smaller percentage was satisfied with the number of study areas available (59.6%).

Table 3.39. Percentage of respondents expressing various levels of satisfaction with aspects of their library facilities.

Library facilities	V. dissat.	Dissat.	Neutral	Sat.	V. sat.
Adequacy of resources (N=1333)	4.3	8.2	23.7	42.3	21.5
Quality of building (N=1332)	4.3	6.5	19.4	37.0	32.7
Number of study areas (N=1332)	7.6	15.5	17.3	38.3	21.3

The canteen was the facility that occasioned the greatest dissatisfaction among respondents (Table 3.40). Less than 10% indicated that they were very satisfied with either the cost or the quality and choice of food available. Half of respondents were either very dissatisfied or dissatisfied with the cost of food, while 43.5% expressed some dissatisfaction with its quality and choice.

Table 3.40. Percentage of respondents expressing various levels of satisfaction with aspects of their canteen facilities.

Canteen facilities	V. dissat.	Dissat.	Neutral	Sat.	V. sat.	N/A
Quality & choice (N=1336)	21.6	21.9	24.7	20.9	9.5	1.4
Cost (N=1337)	27.1	22.9	22.0	19.6	7.1	1.3

Approximately one respondent in five (19.6%) was dissatisfied or very dissatisfied with the sports facilities available in their IT, while 42.7% were satisfied or very satisfied with the facilities (Table 3.41). The item was deemed not applicable by 11.2% of respondents. Unfortunately, it is unclear if respondents meant that the item was not applicable to them, as they had no interest in sport, or that there were no sports facilities in the college. The percentage of respondents satisfied with college societies was the same (42.7%) as for sports facilities, with 12.8% describing themselves as dissatisfied or very dissatisfied.

A majority (60.7%) of respondents described crèche facilities as not applicable to them, while 16.6% described themselves as dissatisfied and 3.8% as satisfied with the facilities (Table 3.41). Of those who indicated that they were the main carer for a dependent child or adult, 54.1% said that they were very dissatisfied, 16.2% were dissatisfied, and nobody was satisfied. Exactly half of respondents were satisfied or

very satisfied with photocopying facilities, while 22.9% were dissatisfied or very dissatisfied. Just over half (56.4%) indicated some level of satisfaction with college health services, with 9.6% indicating some level of dissatisfaction. Most respondents (73.3%) were satisfied or very satisfied with college banking services, while a minority (19.4%) was satisfied or very satisfied with student bar facilities. A majority indicated that on-campus accommodation was not applicable to them. When these are excluded, 46.1% of the remainder were very dissatisfied, 11% were dissatisfied, and 16.3% were either satisfied or very satisfied.

Student facilities	V. dissat.	Dissat.	Neutral	Sat.	V. sat.	N/A
Sports (N=1326)	9.7	9.9	26.5	28.7	14.0	11.2
Societies (N=1320)	4.8	8.0	36.4	31.4	11.3	8.0
Crèche (N=1280)	12.2	4.4	19.0	2.3	1.5	60.7
Photocopying (N=1323)	8.5	14.4	24.1	36.7	13.3	2.9
Health (N=1322)	3.0	6.6	28.9	37.7	18.7	5.1
Banking (N=1331)	3.5	5.4	15.2	45.7	27.6	2.6
Student bar (N=1298)	29.6	4.9	7.6	9.8	9.6	38.6
Campus accom. (N =1296)	18.1	4.3	10.5	4.2	2.2	60.6

Table 3.41. Percentage of respondents expressing various levels of satisfaction with aspects of their student facilities.

To simplify comparisons between colleges, items were grouped to form subscales. For example, the eight items dealing with student facilities were summed (not applicable responses were treated as missing data) and a mean "satisfaction score" for student facilities was obtained for each respondent. To verify that each sub-scale was internally consistent (i.e., that each was measuring the same underlying construct) Cronbach's *alpha* was calculated. With the exception of the lectures and the tutorial sub-scales ($\alpha = .55$ and .58, respectively), all sub-scales had a Cronbach *alpha* coefficient greater than .7, suggesting that the items provided a reasonable representation of a common construct. As it is not unusual to find a low Cronbach's *alpha* in scales with few items, the mean inter-item correlations for the items in the lectures and tutorials sub-scales were examined. All inter-item correlations for the lectures and the tutorials sub-scales were within the range .2 to .4, which Briggs and Cheek (1986) recommended as optimal. Table 3.42 shows the mean satisfaction scores, by college, for each of the eight aspects of college life rated. Mean satisfaction scores for computer facilities differed significantly by college (F=14.205, df =11, 1323, p<.001). In descending order, students in Cork, Carlow and Letterkenny had the highest scores, while Limerick and Athlone students had the lowest (Table 3.41). Ratings for laboratory facilities also varied significantly between colleges (χ^2 =103.681, df = 11, p<.001⁴). Again, students in Cork had the highest satisfaction score for laboratory facilities, followed by students in GMIT-C, while students in Limerick and Athlone again had the lowest. Ratings for canteen facilities varied significantly between colleges (F=23.091, df =11, 1302, p<.001), with Cork students having the lowest mean satisfaction score, while Sligo and Letterkenny students had the highest.

Satisfaction with student facilities was highest in Waterford and Athlone and lowest in Tallaght and Limerick (F=17.712, df = 11, 1324, p<.001). Although significant ($\chi^2 = 45.529$, df = 11, p < .001), there was less variation between colleges on how satisfied respondents were with lectures. Letterkenny students had the highest satisfaction score for lectures, while GMIT-G, Limerick and Tralee had the lowest. Cork respondents were least satisfied with tutorials, while Letterkenny and Sligo respondents were most satisfied ($\chi^2 = 96.892$, df = 11, p < .001). Waterford and Dundalk respondents were most satisfied with teaching staff, while those in Tallaght were least satisfied ($\chi^2 = 67.650$, df = 11, p < .001).

Finally, satisfaction with library facilities varied by college ($\chi^2 = 338.441$, df = 11, p < .001). Waterford's library facilities received the most positive ratings, followed by Carlow, Letterkenny and Sligo, while Dundalk's facilities received the poorest.

⁴ As the Levene test was significant (value less than 0.5) the non-parametric equivalent of Anova, the Kruskal-Wallis test, was used as it is suitable for data showing heterogeneity of variance.

Table 3.42. (Pa	rt 1). Mean s	satisfaction	score ⁵ , by J	IT, for vario	us college	facilities.						
	Comp	outer Facili	ties	La	b Facilities	5	Can	teen Facilit	ies	Stuc	dent Facili	ties
	Z	Mean	SD	Z	Mean	SD	Z	Mean	SD	N	Mean	SD
Athlone	165	3.0	1.10	78	3.1	1.05	161	3.0	1.06	170	3.7	0.66
Carlow	06	3.9	0.92	77	3.8	0.80	89	3.1	1.06	89	3.6	0.76
Cork	116	4.0	0.85	116	4.0	0.72	114	1.9	0.93	114	3.5	0.68
Dundalk	173	3.2	0.87	72	3.5	0.80	171	2.9	1.09	173	3.5	0.73
GMIT-C	82	3.8	1.00	75	3.9	0.81	62	2.9	1.07	82	3.2	0.78
GMIT-G	137	3.4	0.86	108	3.6	0.87	133	2.3	1.02	136	3.2	0.66
Letterkenny	63	3.9	1.00	35	3.4	0.97	63	3.3	1.11	63	3.1	0.79
Limerick	95	3.0	0.97	63	2.9	1.02	94	2.5	1.15	96	2.9	0.80
Sligo	65	3.6	06.0	23	3.9	0.62	65	3.3	0.91	65	3.5	0.85
Tallaght	208	3.3	0.86	95	3.5	0.93	206	2.2	0.98	209	2.9	0.79
Tralee	66	3.5	0.95	71	3.7	0.83	67	2.3	0.97	76	3.4	0.81
Waterford	42	3.7	06.0	34	3.7	0.62	42	3.1	1.00	42	3.7	0.61
Total	1335	3.5	0.98	847	3.6	0.91	1314	2.6	1.12	1336	3.3	0.79

⁵ Scores have a range of between 1 and 5, with higher scores indicating greater satisfaction.

r															
	ies	SD	0.71	0.68	0.82	06.0	0.84	0.98	0.76	1.08	09.0	0.74	0.92	0.56	0.95
	rary facilit	Mean	4.0	4.3	4.0	2.8	3.9	3.3	4.2	3.4	4.2	3.7	3.4	4.5	3.7
	Lib	Ν	170	90	116	174	82	134	63	96	64	208	67	42	1336
	Ŧ	SD	0.70	0.83	0.89	0.67	0.85	0.87	0.86	0.82	0.74	0.70	0.67	0.61	0.78
	tching Staf	Mean	3.7	3.7	3.7	3.8	3.6	3.5	3.5	3.4	3.7	3.3	3.5	3.8	3.6
	Tea	Z	169	06	115	173	82	137	63	96	65	209	67	42	1338
acilities.		SD	0.92	0.76	1.03	0.65	0.80	0.75	0.77	0.69	0.64	0.96	0.84	0.79	0.85
IS COLLEGE IS	Tutorials	Mean	3.2	3.1	2.8	3.5	3.4	3.2	3.7	3.4	3.6	3.0	3.1	3.3	3.3
l, IOT Variou	-	N	149	89	94	172	78	135	63	96	62	134	62	35	1169
score, by 11		SD	0.65	0.80	0.65	0.62	0.67	0.77	0.64	0.72	0.66	0.70	0.75	0.58	0.70
ausiaction	ctures	Mean	3.6	3.7	3.7	3.7	3.7	3.4	3.9	3.5	3.8	3.7	3.5	3.8	3.6
t 2). Mean s	Ι	Ν	170	90	116	174	82	137	62	96	65	209	100	42	1343
1 able 5.42. (Pal			Athlone	Carlow	Cork	Dundalk	GMIT-C	GMIT-G	Letterkenny	Limerick	Sligo	Tallaght	Tralee	Waterford	Total

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SUGGESTED CHANGES

Respondents were asked what changes, if any, they would like to see made to improve a number of areas such as lectures, tutorials, and student facilities. The canteen occasioned the greatest number of negative comments and suggestions for improvement (60.9% of respondents), followed by computer facilities (51%) (Table 3.43). Laboratory facilities (12.8%) and accommodation services (16.1%) were the areas for which the lowest percentages suggested improvement. However, this is partly due to neither being applicable to many respondents. Although specifically asked what changes they would like to see made, some respondents made positive comments. Library facilities occasioned the most positive comments (10.7%) while accommodation services (5.1%) and canteen facilities (5.6%) occasioned the fewest.

Type of comment and level of dissatisfaction varied considerably between colleges (Table 3.43). There are significant differences between colleges in the percentages of respondents making suggestions for improvement to teaching staff ($\chi^2 = 52.649$, df = 11, p < .001), lectures ($\chi^2 = 40.703$, df = 11, p < .001), tutorials ($\chi^2 = 99.182$, df = 11, p < .001), computer facilities ($\chi^2 = 74.469$, df = 11, p < .001), library facilities ($\chi^2 = 92.428$, df = 11, p < .001), canteen facilities ($\chi^2 = 102.655$, df = 11, p < .001), student facilities ($\chi^2 = 111.482$, df = 11, p < .001), and accommodation services ($\chi^2 = 47.244$, df = 11, p < .001).

Four in ten Limerick (40.6%) and Letterkenny (39.7%) students made some criticism of teaching staff (Table 3.42). In contrast, only 14.3% of Waterford students had suggestions to improve teaching staff. Similarly, 44.8% of Limerick respondents made suggestions for improving lectures, as did 35.7% of Tallaght respondents, compared to only 14.3% of Waterford students. Over half of respondents in Letterkenny (55.6%), Cork (53.4%) and Carlow (53.3%) made negative comments about tutorials, compared to only 12% of respondents in GMIT-C.

While 51% of all respondents made negative comments about computer facilities, this rose to almost 70% in Limerick (69.8%) and Sligo (69.7%). GMIT-C had the lowest proportion of students (30.1%) making negative comments about computer facilities. Suggestions for changes to laboratory facilities averaged 12.8% and did not vary significantly across colleges. Negative comments about library facilities ranged from 52.9% of Dundalk respondents to as few as 6.3% of Letterkenny respondents.

Table 3.43. Percentage	e of responden	ts, by IT, ma	aking suggestic	ons for improv	vement to var	ious aspects	of their colleg	ge.	
	Teaching Staff	Lectures	Tutorials	Computer Facilities	Lab Facilities	Library Facilities	Canteen Facilities	Student Facilities	Accommodation Services
Athlone (N=173)	17.3	23.7	35.8	52.0	9.2	21.4	49.7	16.8	17.3
Carlow (N=90)	31.1	30.0	53.3	35.6	17.8	24.4	64.4	42.2	13.3
Cork (N=116)	31.9	27.6	53.4	37.1	12.1	36.2	79.3	25.9	16.4
Dundalk (N=174)	17.8	21.8	23.0	58.6	12.1	52.9	47.7	28.2	8.6
GMIT-C (N=83)	28.9	30.1	12.0	30.1	7.2	19.3	36.1	34.9	16.9
GMIT-G (N=137)	22.6	16.8	32.8	59.9	11.7	29.2	57.7	36.5	13.9
Letterkenny (N=63)	39.7	25.4	55.6	34.9	11.1	6.3	63.5	42.9	22.2
Limerick (N=96)	40.6	44.8	49.0	69.8	19.8	45.8	60.4	61.5	21.9
Sligo (N=66)	37.9	33.3	30.3	69.7	10.6	36.4	71.2	39.4	39.4
Tallaght (N=210)	37.6	35.7	22.4	55.7	16.7	33.3	80.5	53.3	11.0
Tralee (N=101)	21.8	21.8	31.7	43.6	8.9	30.7	51.5	21.8	12.9
Waterford (N=42)	14.3	14.3	26.2	45.2	16.7	9.5	0.69	16.7	26.2
Total (N=1351)	27.9	27.4	34.0	51.0	12.8	31.5	6.09	35.4	16.1

Canteen facilities averaged more complaints than any other type of facility, with 60.9% of the total sample making suggestions for change or negative comments. Again, there was considerable variation between colleges. GMIT-C had proportionally the lowest amount of negative comments (36.1%) while four out of five respondents in Tallaght (80.5%) and Cork (79.3%) wrote negative comments about their college's canteens.

Approximately one-third of respondents (35.4%) suggested changes to student facilities. Limerick had the highest percentage of students (61.5%) criticising current student facilities, while Waterford (16.7%) and Athlone (16.8%) had the lowest. Criticism of accommodation services was not widespread, largely because many respondents indicated that it was not applicable to them. At 39.4%, Sligo had the largest percentage of respondents who made suggestions for improvement to their college's accommodation services. Sligo also had the largest percentage of respondents living in rented accommodation or digs (74.3%, compared to an average of 39.2%), which may partly explain the above average number of criticisms. Sligo also had the lowest percentage (1.5%) of positive comments about the college accommodation service.

Table 3.44 summarises the main types of change suggested by respondents. The most frequently suggested change for teaching staff related to approachability or sympathy to the needs of students (9%), followed by lecturing skills and techniques (8.4%). According to some students, a minority of lecturers did not take into account the ability or prior knowledge of the class in their lectures.

"I think some don't explain things clearly, they just throw up an overhead and expect you to know it"

"I think they know a lot, but they are unable to pass that info on to students" Suggestions varied between colleges and courses. For example, while 22.6% of Cork Computing students suggested that the teaching staff become more approachable, none of the respondents studying Construction Studies in Tralee, Computing in Waterford, or Science in Athlone suggested this. While none of the Construction Studies students in Tralee suggested improvements in the ability of teaching staff to explain things more clearly to students, 53.3% of respondents studying Electronics in Letterkenny suggested this.

Overall, 13.5% of students criticised the organization of their lecturing schedule, a figure that rose to 40.8% among Limerick Construction Studies students.

Lectures were described as poorly scheduled (for example, one at 9 a.m. and the next at 4 p.m.), or the amount of timetabled hours was criticised (typically for being excessive, although a small number of students would like more timetabled periods).

"A tighter timetable would be better instead of one class then five hours off then another class"

More than a quarter of respondents (27.9%) complained that they either had no tutorials or that the number offered was insufficient. Some suggested that tutorials should be available for every subject.

"Should be for all subjects and not just some as people's grasp of subjects will vary"

"I feel these are more important than lectures so there should be more emphasis on these and more time allocated"

Again, there was considerable variation between courses and colleges, with 61.2% of Science students in Cork and 61.1% of Electronics students in Sligo wanting more tutorials, compared to nobody studying Construction Studies in Waterford.

One-third (33.6%) of all students suggested that computer facilities could be improved by making more hardware and software available, or by ensuring that the available equipment was functioning properly. Complaints about equipment shortages rose to 70.2% among Computing students in Limerick. More generally, however, the availability of equipment was related to course type, with proportionally fewer complaints from Electronics (21.2%), Science (29%) and Computing (29.5%) students than from Business Studies (37.1%) and Office Information Systems (38.8%) students $(\chi^2 = 16.531, df = 5, p = .005)$. One in ten (10.9%) students indicated that access to computer facilities should be improved. Even when the number of computers per head was adequate, the time periods during which computers could be accessed might be limited. For example, other students could not use the equipment when a computer laboratory was being used for a class, while in other cases, computers were unavailable after 5 p.m.

Suggestions for improvement to laboratories were not made by more than 5% of the overall sample. However, Science students in Carlow (25%) and Cork (10.6%), and Electronics students in GMIT-G (10.9%) and Waterford (16.7%) criticised the modernity of the laboratory equipment.

"They should be updated and more equipment made available"

"The labs are always freezing making them uncomfortable to work in".

Five percent of respondents indicated that there was an insufficient number of course books in the library, while 16.1% said that library space was inadequate. Space was an issue in some colleges ($\chi^2 = 206.550$, df = 11, p < .001), with 47.1% of Dundalk students raising it, but not in others (nobody in Sligo or Carlow raised it).

"It's too stuffy and congested" While an average of 4.9% of respondents suggested that their college library would benefit from an improvement in facilities such as photocopiers and computers, the figure in Sligo was 19.7%.

The canteen was the area that evoked most suggestions for improvement. An average of 35.3% of respondents complained about the quality of food, while 30.3% considered the food was too expensive.

"The food is disgusting and overpriced"

"Proper dinners instead of chips, chips and more chips"

Complaints about the quality of the food varied significantly between colleges, with Waterford having the lowest percentage of respondents (7.1%) and Cork (47.4%) the highest criticising the quality of food ($\chi^2 = 41.487$, df = 11, p < .001). Complaints about cost also varied significantly between colleges, with Cork having the highest percentage of respondents (56.9%) who criticised the price of canteen food ($\chi^2 = 123.558$, df = 11, p < .001). Hygiene was not an issue in five colleges, while only one student raised it in three colleges. However, 19% of Cork students and10.9% of Tralee students complained about canteen hygiene. One in ten (10.3%) thought that the available seating was inadequate. Half the students in Waterford and a quarter in Letterkenny mentioned lack of seating. While having to queue for prolonged periods was mentioned by only 1.4% of the total sample, it was raised by 18.2% of students in Sligo.

While 10.4% of the total sample criticised the general lack of student facilities in their college, the figure rose to 31.3% in Limerick.

"Need a college bar, not just for alcohol but also for somewhere else to pass the big gaps in the timetable"

Tallaght had the largest percentages of respondents complaining about the lack of a student bar (31%, compared to an average of 16.4%) and of sports facilities (14.3%, compared to an average of 6.4%).

Most comments on accommodation services focused on availability. Overall, 7.9% suggested that more accommodation should be made available either on-campus

or close to college. In Sligo (the college with the highest proportion of respondents living in rented accommodation), 30.3% made this suggestion. In contrast, in Tallaght (where none of the respondents lived in rented accommodation, and only two lived in "digs"), only 2.4% of respondents suggested this.

Suggested changes to	N	%
Teaching Staff		
More approachable / sympathetic	121	9.0
Criticism of lecturing ability	113	8.4
Lectures		
Too many / too few / bad times	183	13.5
Tutorials		
More / some tutorials	377	27.9
Computer facilities		
More computers / printers / functioning stuff needed	454	33.6
Access	147	10.9
Modernise software / hardware	97	7.2
Library facilities		
Space	217	16.1
Books	67	5.0
Canteen		
Quality	477	35.3
Cost	410	30.3
Space	139	10.3
Student facilities		
None / more needed	140	10.4
Student bar	222	16.4
Sports facilities	87	6.4
Accommodation services		
More accommodation available	107	7.9

Table 3.44. Criticisms and suggestions cited by more than 5% of the total number of respondents.

SUMMARY

The typical student surveyed was 19 years old, single, living in the parental home and attending college for the first time. Although all those surveyed were enrolled on National Certificate courses, only 8.5% indicated that a National Certificate was the highest level of education to which they aspired, with two-thirds indicating that they would like to obtain a degree.

Approximately one in five did not know the highest level of education attained by their parents. Of those that did know, maternal attainment was slightly higher than paternal attainment. Relatively few reported that their mother or father had completed any post-Secondary education. Approximately half of respondents' mothers were employed, as were just over 80% of fathers. Unemployment rates for fathers and mothers were slightly higher than the national average for the time period during which the survey was carried out.

The location of the college appeared to be the most important factor in selection of IT, while interest in the subject matter was the most important factor in course selection. Despite the fact that two-thirds of respondents were enrolled on their first choice course, few indicated that they "very much" understood what their course would be like before they applied. Waterford had the highest proportion of students enrolled on their first choice course (81%) while, at just under 53%, Tallaght and Limerick had the lowest. Approximately half indicated that they had received some help or guidance with their choice of course, and these reported a greater prior understanding of their course than did those who had not received help.

For most, the experience of college had met or surpassed their expectations, but for 12.1%, it was worse than they had expected. In particular, almost one in five students in Cork and Letterkenny ITs described their college experience as worse than expected. A minority of students (but just over half of Electronics students) reported a larger than expected workload, and a small proportion said that they had great difficulty with their course work. Males were more likely than females to report no difficulty with course work while Computing was the course of study with the largest proportion of students reporting great difficulty. Half of those surveyed indicated difficulty with their course because they had not taken a certain subject in school.

A minority of those surveyed had attended all classes in the previous week. Illness or a medical appointment, followed by tiredness or laziness were the reasons most commonly offered for missing classes, with considerable variation by college. For example, transport difficulties was the reason most frequently cited by Tallaght students, whereas a dislike of the subject or lecturer, or general lack of interest was cited by over 16% of students in Cork, Letterkenny and Sligo, but not by any student in Waterford.

Most of those surveyed were glad to be attending their chosen college and course. Sixty percent felt that they could relate their course material to their career

goals, and half agreed that they would rather be at college than anywhere else. A minority agreed that family and friends encouraged them to stay in college, with females more likely than males to agree that family and friends offered encouragement. One-third of those surveyed felt lost when they first came to college and almost one in ten still felt lost at the time the survey was carried out. Females were more likely than males to admit to feelings of isolation.

Most respondents had a paid job, and just over half of those with jobs believed that it did not interfere with their studies (probably as over 80% did not work during timetabled hours). However, given that the average number of hours worked was 19.41, it is likely that study time was curtailed by employment, even if class contact was unaffected. Major sources of financial support for respondents included money from parents, personal savings, and a grant. Almost half strongly agreed that college cost more than expected, although nearly as many agreed that they did not budget their money as well as they could.

Regarding aspects of the quality of introduction to college life, satisfaction was highest with the introduction given to the Student Union, and lowest with the introduction given to classmates. Overall, GMIT-C and Sligo students appeared most satisfied with their college induction while Waterford students appeared least satisfied. Regarding current levels of satisfaction, just over half of those surveyed were satisfied with the availability, enthusiasm, approachability and reliability of lecturing staff. Waterford and Dundalk respondents were most satisfied with lecturing staff, while Tallaght respondents were least satisfied.

Almost one-third were dissatisfied with the number of tutorials available and with access to computer laboratories. A majority were satisfied with library facilities, with Waterford students expressing the highest satisfaction levels and Dundalk students expressing the lowest. Greatest dissatisfaction was expressed towards canteen facilities and (for those for whom it was applicable) crèche facilities. Dissatisfaction with canteen facilities was highest in Cork and lowest in Sligo and Letterkenny. Overall satisfaction ratings for student facilities was highest in Waterford and Athlone and lowest in Tallaght and Limerick.

The open-ended response section at the end of the survey asked students what changes, if any, they would like to see made to certain aspects of college life. Although there was considerable variation in responses, canteen facilities occasioned more negative comments than any other aspect. In particular, approximately 80% of

respondents in Tallaght and Cork wrote negative comments about canteen facilities in their college. Comments were made about computer facilities by half of respondents, including almost 70% of those surveyed in Limerick and Sligo. Just over one-third of those surveyed made comments about tutorials and student facilities.

The most frequently suggested changes relating to teaching staff were for them to become more approachable and to improve their lecturing skills, while by far the most frequent change suggested in relation to tutorials was to have more of them. The most frequently suggested improvement to computer facilities was to have more *functioning* computer hardware, while the commonest complaint about library facilities concerned lack of space. As regards the canteen, most complaints centred around the quality and cost of canteen food, while, for student services, the lack of a campus bar was most frequently mentioned.

4. STUDENTS WHO CONSIDERED LEAVING THE COURSE

All respondents were asked if they had ever considered leaving their course. It emerged that more than half had thought of dropping out of their course at some point. Specifically, 46.3% indicating that they had never given thought to this option, while 27.9% had thought about leaving, but did not wish to do so any longer. A further 23.2% said that they sometimes still thought about leaving and 2.7% said that they definitely wanted to leave their course. Obviously, while not everyone who thinks about any course of action, actually carries it through, there is considerable evidence that thinking about leaving is an important predictor of eventual departure from higher education courses (Tinto, 1993).

In this chapter, we consider the differences between students how had thought about leaving their courses and those who had not. Initially, differences in background are examined as well as differences between courses. We also look at differences with regard to preparation and knowledge about courses before students came to college. Differences with respect to expectations of courses as well as their actual experiences of teaching and learning in their courses.

In the absence of information on what students actually did at the end of the academic year, these data are particularly valuable since there is support indicating that intentions of this kind are good predictors of actual behaviour. A large body of evidence in social psychology shows that intentions are especially good predictors of certain behaviours and can help to understand who the influences of attitudes and beliefs are mediated (e.g. the theory of reasoned action of Fishbein and Azjen, 1975).

For these reasons, the differences between people who have never thought of leaving and those who have thought about doing so may provide important clues to the factors that might be important in the actual decision to leave. Since the earlier survey has shown that a large number of students quit before examinations, this information is of considerable value. Obviously, however, there are limitations to how much we can infer from this information since the focus is on having thought about leaving rather than actually departing the institution. Furthermore, the findings are relevant to examination failure only to the extent that anticipation of examination failure may have caused students to consider leaving.
BACKGROUND

There were no significant gender differences in students' consideration of dropping out. An almost identical proportion of males (46.9%) and females (45.8%) had never considered leaving their course, while only 2.8% of males and 2.6% of females currently wanted to leave. However can be seen from Table 4.1, there is a significant relationship between age-group and having considered leaving college ($\chi^2 = 16.38$, df =4, p < .001). The major difference is associated with students who were aged 21 years and over, who were less likely than younger age-groups to say that they had considered leaving. While over a quarter of students aged up to 20 years old were still thinking about leaving their courses, this was true of a much smaller number of students aged 21 years or older. These findings suggest that 'older' students are somewhat less likely to think about leaving their courses. However, it should be noted that the percentage of mature students in the ITs is relatively low, especially by international standards in higher education.

		0	
Considered leaving?	17-18	19-20	21+
Never (N=619)	47.0	42.6	60.2
No longer (N=374)	25.5	31.3	24.8
Still/want to (N=346)	27.5	26.1	15.0

Table 4.1. Age-group and considering leaving the course.

An important issue is the relationship between having thought about leaving and social background. Table 4.2 shows the association between fathers' education and having considered leaving college. While the association is statistically significant $(\chi^2 = 22.52, df = 10, p < .05)$, it is quite small and the pattern is not consistent across the various levels of education. For example, the highest percentage of students who have never thought of leaving is found among two groups who are very different from each other - those who parents had completed primary school only and those whose parents had completed a third-level Certificate or Diploma course. Similarly, there is no consistent pattern with regard to the percentage in each educational grouping who say that they still are thinking about leaving. A similar analysis based on mothers' education did not reveal any statistically significant differences. Therefore, it seems reasonable to say that educational background as measured by these indicators does not relate to having thought about dropping out from college during the academic year. This is an important finding given the evidence on the relationship between social background and gaining access to college (Clancy &Wall, 2000).

rable 4.2. Tather's education and considering leaving the course.									
Considered leaving?	Primary	Inter	Leaving	Cert./	Degre	Postgrad.			
	school	Cert.	Cert.	Dip.	e	qualification			
Never (N=489)	53.0	45.3	47.3	53.9	38.3	48.0			
No longer (N=270)	22.3	23.5	29.0	33.7	38.3	28.0			
Still/want to (N=256)	24.7	31.2	23.7	12.4	23.3	24.0			

Table 4.2. Father's education and considering leaving the course.

VARIATIONS BY COLLEGE AND COURSE

When colleges are compared, Cork (68.9%) and Waterford (66.7%) had the highest percentages of students who had either thought about leaving or actually wanted to leave their course, while Tralee (42.0%) had the lowest. Limerick had the highest percentage (6.3%) who currently wanted to leave, while, at the other extreme, nobody in Sligo did (Table 4.3).

Table 4.3. Percentage of respondents, by IT, indicating if they had ever thought of leaving their course.

	Never	No	Sometimes	Want to
		longer		leave
Athlone (N=173)	48.6	29.5	19.7	2.3
Carlow (N=89)	34.8	31.5	30.3	3.4
Cork (N=116)	31.1	36.2	29.3	3.4
Dundalk (N=174)	46.0	25.3	24.7	4.0
GMIT-C (N=83)	47.0	19.3	32.5	1.2
GMIT-G (N=135)	51.9	28.9	18.5	0.7
Letterkenny (N=63)	49.2	20.6	28.6	1.6
Limerick (N=95)	36.8	26.3	30.5	6.3
Sligo (N=66)	53.0	21.2	25.8	0.0
Tallaght (N=210)	52.4	30.5	14.3	2.9
Tralee (N=100)	58.0	22.0	18.0	2.0
Waterford (N=42)	33.3	40.5	23.8	2.4
Total (N=1346)	46.3	27.9	23.2	2.7

Although responses did not vary significantly by course type, there was considerable variation between courses in the different colleges (Table 4.4). Construction Studies was the course where most variation occurred. Four out of five (78.6%) Construction Studies students in GMIT-C had considered dropping out, and of these 64.3% still sometimes considered leaving the course. In contrast, 61.1% of GMIT-G Construction Studies students had never thought of leaving, and none of them definitely wanted to leave at the time of the survey. In interpreting these results, it should be noted that the numbers in some individual courses are quite small.

		Never	No longer think about leaving	Sometimes think about leaving	Want to leave
Business	Athlone (N=148)	48.6	29.1	19.6	2.7
Studies	Dundalk (N=118)	45.8	25.4	25.4	3.4
	Letterkenny (N=48)	52.1	20.8	27.1	0.0
	Tallaght (N=179)	50.8	30.2	15.6	3.4
	Total (N=493)	49.1	27.8	20.3	2.8
Computing	Cork (N=31)	25.8	48.4	22.6	3.2
	GMIT-C (N=53)	56.6	17.0	24.5	1.9
	GMIT-G (N=54)	48.1	24.1	25.9	1.9
	Limerick (N=46)	39.1	21.7	34.8	4.3
	Waterford (N=14)	35.7	35.7	21.4	7.1
	Total (N=198)	43.9	26.3	26.8	3.0
Construction	GMIT-C (N=14)	21.4	14.3	64.3	0.0
Studies	GMIT-G (N=36)	61.1	25.0	13.9	0.0
	Limerick (N=49)	34.7	30.6	26.5	8.2
	Tralee (N=21)	66.7	14.3	19.0	0.0
	Waterford (N=10)	30.0	50.0	20.0	0.0
	Total (N=130)	45.4	26.2	25.4	3.1
Electronics	GMIT-C (N=16)	37.5	31.3	31.3	0.0
	GMIT-G (N=45)	48.9	37.8	13.3	0.0
	Letterkenny (N=15)	40.0	20.0	33.3	6.7
	Sligo (N=18)	44.4	22.2	33.3	0.0
	Waterford (N=18)	33.3	38.9	27.8	0.0
	Total (N=112)	42.9	32.1	24.1	0.9
Office	Carlow (N=61)	29.5	24.6	41.0	4.9
Information Systems	Dundalk (N=56)	46.4	25.0	23.2	5.4
Systems	Sligo (N=48)	56.3	20.8	22.9	0.0
	Tralee (N=79)	55.7	24.1	17.7	2.5
	Total (N=244)	47.1	23.8	25.8	3.3
Science	Athlone (N=25)	48.0	32.0	20.0	0.0
	Carlow (N=28)	46.4	46.4	7.1	0.0
	Cork (N=85)	32.9	31.8	31.8	3.5
	Tallaght (N=31)	61.3	32.3	6.5	0.0
	Total (N=169)	42.6	34.3	21.3	1.8

Table 4.4. Percentage of respondents, by course and IT, indicating if they had ever thought of leaving their course.

Among Science students, those attending Cork were most likely to have thought about leaving (67.1%), whereas only 38.8% of Tallaght students had thought of dropping out. Carlow had the highest percentage (41.0%) of Office Information Systems students who reported sometimes wanting to leave their course and the lowest percentage (29.5%) who had never thought of dropping out. Only 25.8% of Computing students in Cork had never thought of leaving their course, compared to just over half (56.6%) of Computing students in GMIT-C. Waterford had the highest percentage (66.7%) of Electronics students who had considered leaving while GMIT-G had the lowest (51.1%). There was less variation among Business Studies courses; almost half of respondents in each of the four colleges had considered leaving.

All students who had considered leaving their course were asked why they had wanted or still wanted to do so. Almost one-third (31.7%) gave reasons relating to the difficulty of the course, a particular subject on the course, or the unexpectedly heavy workload (Table 4.5). Citing difficulty of course as a reason for considering dropout varied significantly by course ($\chi^2 = 74.371$, df = 5, p < .001). While it was cited by 55.0% of Computing students and 50.0% of Electronics students, only 14.7% of those studying Business Studies mentioned it.

	Course too hard	No interest	Get a job /money	No reason given	Problems settling in	Other
Bus. Studies (N=251)	14.7	26.3	20.3	7.2	7.2	13.9
Computing (N=111)	55.0	27.0	5.4	3.6	3.6	11.7
Con. Studies (N=71)	25.4	23.9	11.3	15.5	0.0	18.3
Electronics (N=64)	50.0	10.9	18.8	10.9	7.8	6.3
OIS (N=129)	37.2	29.5	22.5	3.9	5.4	9.3
Science (N=97)	34.0	26.8	15.5	7.2	5.2	11.3
Total (N=723)	31.7	25.4	16.7	7.2	5.4	12.2

Table 4.5. Percentage of respondents, by course, who considered leaving their course offering various reasons for their wish to leave.

Lack of interest in the course, dislike of the course, or the realisation that they may have chosen the wrong course was cited by 25.4%. These reasons were identified by 29.5% of Office Information Systems students but by only 10.9% of Electronics students. One in six students (16.7%) had considered leaving their course because of financial difficulties or because they wanted to get a job and have a better living standard than they had as students. Reasons relating to finance were offered by 22.5%

of Office Information Systems students but by only 5.4% of those studying Computing ($\chi^2 = 17.416$, df = 5, p = .004).

A small percentage (7.2%) did not give any reason, while 5.4% cited an initial difficulty in settling in. All other reasons were offered by less than 5% of respondents, and included the course not being their first preference, a dislike of college in general or of the college they were attending, and problems with travel to and from college.

SELECTION OF COURSES

It will be recalled that students had been asked about the importance of various factors in their decision to enrol in their particular course in the IT. In the case of each factor, students gave a rating on a 5-point scale from 'unimportant' to 'important'. Students' ratings of these factors were associated with whether or not students had thought about leaving (Table 4.6). Thus, students who had never considered leaving were significantly more likely to rate the academic reputation of the college as important than were students who were still considering leaving ($\chi^2 = 39.49$, df = 8, p < .001). A somewhat similar pattern emerged with regard to the perception that this was the best course in the chosen discipline. Whereas 33.8% of students who had never considered leaving perceived this factor to be important, only 21.6% of those who still wanted to leave considered it an important factor ($\chi^2 = 24.65$, df = 8, p < .001).

There also is a significant association between the importance attached to interest in the subject as a reason for course selection and whether or not the student indicated that they had or were still considering leaving ($\chi^2 = 59.49$, df = 8, p < .001). The greatest differences emerged between students who still wanted to leave and those who never wanted to leave or no longer wanted to leave. Less than half of those who still wanted to leave rated interest in the subject as important while the percentage in the other two groups who rated this as important was between two thirds and three quarters.

Two non-academic reasons for selecting courses also showed a significant association with having or not having thought about leaving. These had to do with having friends starting the course and parents' influence. However, the associations are not especially strong. Those who were influenced by their friends were somewhat more likely to say that they had thought about leaving, ($\chi^2 = 20.11$, df = 8, p < .05). Similarly, students who had been influenced by their parents were somewhat less likely to say that they had thought about leaving; ($\chi^2 = 17.14$, df = 8, p < .05).

Considered leaving?	Unimp.	Not v. imp.	Neutral	Somewhat imp.	Imp.					
Academic reputation of the college										
Never (N=611)	8.7	11.9	32.2	28.5	18.7					
No longer (N=368)	8.4	12.0	35.6	26.6	17.4					
Still/want to (N=340)	18.5	16.2	31.5	23.8	10.0					
It offere	d the best	course in r	ny chosen d	iscipline						
Never (N=606)	7.6	7.6	25.6	25.4	33.8					
No longer (N=364)	4.7	8.0	27.2	31.6	28.6					
Still/want to (N=333)	6.6	12.0	30.9	28.8	21.6					
	I had fi	riends start	ing there							
Never (N=610)	44.4	15.9	17.2	16.1	6.4					
No longer (N=369)	41.5	20.6	17.6	13.0	7.3					
Still/want to (N=337)	39.2	12.2	18.1	19.6	11.0					
	I was int	erested in	the subject							
Never (N=621)	2.6	1.8	4.5	18.7	72.5					
No longer (N=375)	2.4	2.7	6.7	19.5	68.8					
Still/want to (N=345)	5.5	4.1	10.1	31.3	49.0					
My p	arents per	suaded me	to do this c	ourse						
Never (N=604)	67.9	13.6	11.8	4.5	2.3					
No longer (N=369)	61.8	16.8	15.7	3.5	2.2					
Still/want to (N=338)	64.2	10.4	14.8	7.7	3.0					

Table 4.6. Importance of factors in course selection and considering leaving the course.

An important issue is the extent to which reflecting on leaving is related to whether or not the course was the student's preferred choice. Students were asked their course choice in terms of the CAO application form. Since the CAO form has two lists of choices (Degrees and Diplomas/Certificates), the information for Diplomas/ Certificates does not give a total a complete picture of students' preferences. The other implication is that the majority of students will have got their first or second choice within the Diploma/Certificate list.

It can seen from Table 4.7 that there is a relatively weak but statistically significant association between considering leaving and the position of the course in the student's preference ($\chi^2 = 17.28$, df = 8, p < .05). Just over 70% of students who

had never considered leaving indicated that their course was their first choice, while for those who still wanted to leave the corresponding figure was just over 61%.

Considered leaving?	1 st choice	2 nd choice	3 rd choice	4 th choice	5 th -lower
Never (N=619)	70.9	16.5	6.1	2.9	3.6
No longer (N=374)	63.6	19.3	10.4	2.4	4.3
Still/want to (N=348)	61.2	18.4	11.5	2.9	6.0

Table 4.7. CAO choice and considering leaving the course.

Students were asked about the extent to which they understood what their course would be like before applying. Table 4.8 shows the association between their responses to this question and whether or not they had considered leaving their course. The association is highly significant ($\chi^2 = 122.69$, df = 8, p < .001). Nearly three-quarters of those who had never considered leaving responded 'very much so' or 'reasonably so' when asked whether they understood what their course would be like before applying. In contrast, less than half of those still thinking about leaving responded in this way. These findings suggest that understanding what courses involve may be an important influence in persisting.

Table 4.8. Onderstanding of what course will be like and considering leaving the course.								
Considered leaving?	Very much	Reasonably	Unsure	Not really	Not at all			
Never (N=623)	16.4	56.8	14.8	11.1	1.0			
No longer (N=374)	5.9	52.9	21.7	16.6	2.9			
Still/want to (N=347)	7.2	38.3	19.0	26.8	8.6			

Table 4.8. Understanding of what course will be like and considering leaving the course.

The understanding of the course might come from various forms of help/guidance in selection. It is therefore of interest to find that there is indeed an association between having had guidance/help in selecting their course and whether or not students had considered leaving. This information is shown in Table 4.9.

Table 4.9.	Rece	ived	guidan	ce in co	ourse se	lection	and	consid	lering	leaving	the cours	se.

Considered leaving?	Yes	No
Never (N=622)	58.7	41.3
No longer (N=373)	56.0	44.0
Still/want to (N=348)	46.8	53.2

As in other instances, the greatest difference is between students who had never considered leaving and those who still think about leaving. The association between having considered leaving and receiving guidance/help is statistically significant ($\chi^2 = 12.92$, df = 2, p < .01).

Finally, an important feature of readiness for college has to do with expectations. In the questionnaire, students were asked to identify the highest qualification that they hoped to attain. The association between their responses and whether or not they had considered leaving is shown in Table 4.10. The association is quite strong and significant ($\chi^2 = 107.60$, df = 8, p < .001). There are rather large differences in relation to students indicating that they aspired to a National Certificate and also in relation to degree/postgraduate qualifications. Of those who had never considered leaving, only just over 4% aspired to a National Certificate only, while over 80% aspired to a degree or postgraduate qualification. In contrast of those who still thought about leaving, over one-fifth aspired to a National Certificate and only over a half aspired to a degree. It is interesting however, that nearly two-thirds of students overall, aspired to a degree.

Considered leaving?	N. Cert.	N. Dip.	Degree	PG	Other
Never (N=602)	4.2	13.5	70.6	11.1	0.7
No longer (N=356)	4.5	19.9	65.2	9.6	0.8
Still/want to (N=338)	20.4	22.2	50.3	6.2	0.9

Table 4.10. Students' aspirations and considering leaving the course.

EXPERIENCE OF COLLEGE AND COURSE

Students were asked a number of questions relating to their experiences in their courses including whether their expectations were met, their ability to cope with the workload, attendance at classes, and satisfaction with various features of teaching, learning and course organisation. The association between students' responses to these matters and whether or not they had considered leaving is described below.

With regard to the extent to which expectation of college experiences had been met, students were asked whether their experiences were worse, the same, or better than they had expected. The association between their responses and whether or not they had thought about leaving is shown in Table 4.11. The association is significant ($\chi^2 = 164.53$, df = 4, p < .001). Students who still were thinking about leaving were several times more likely than those who no longer thought about leaving and those

who had never thought about leaving to report that their college experience had been worse than their expectations.

Considered leaving?	Worse than expected	About expected	Better than expected
Never (N=623)	3.7	63.1	33.2
Not any longer (N=373)	10.2	65.4	24.4
Still/want to leave (N=348)	29.3	58.9	11.8

Table 4.11. Expectations regarding college experience and considering leaving the course.

One of the reasons why courses were not in accordance with students' expectations might have to do with the amount and difficulty of coursework. Students were asked about the extent to which their workload was more or less than they expected and also about their ability to cope with course work. The association between perceptions of the level of coursework and thinking about leaving college is significant ($\chi^2 = 61.20$, df = 4, p < .001). For example, 44% of students who were still considering dropping out or wanting to leave reported that their workload was more than they had expected, compared to only 22.6% of students who hadn't thought about leaving (Table 4.12).

Considered leaving?	More than	About	Less than
	expected	expected	expected
Never (N=623)	22.6	63.6	13.8
Not any longer (N=374)	37.4	53.7	8.8
Still/want to leave (N=348)	44.0	41.7	14.4

Table 4.12. Expectations of workload and considering leaving the course.

REASONS FOR EXPERIENCED DIFFICULTIES

It is clear from the evidence considered above that of students who were or had considered leaving the expectations of college, including the workload that they encountered differed from those of students who had not considered leaving. We now consider a number of factors relating to why they might be experiencing these difficulties, including whether or not they had not taken particular subjects in school. Other factors that may have contributed that are also examined include perception of course organisation, views of instruction and teaching staff, attendance at classes, and attitudes to courses. Students might experience difficulties if they have not taken particular subjects in school which are central to their courses. There is a significant association between the perception of difficulties arising from this and whether or not students reported that they had thought about leaving ($\chi^2 = 24.91$, df = 2, p < .001) (Table 4.13). The major differences are between those who had never thought of leaving and the other two groups. Whereas 42.6% of students who had never thought of leaving said that they had difficulties because they had not taken certain subjects in school, well over a half of those who had thought about or who were still thinking about leaving indicated that not having taken certain subjects caused them problems.

Table 4.13. Difficulty with course due to not taking certain subjects in school and considering leaving the course.

Considered leaving?	Difficulty	No difficulty
Never (N=620)	42.6	57.4
Not any longer (N=373)	56.0	44.0
Still/want to leave (N=347)	56.5	43.5

As might be expected, students who were thinking of leaving had rather different views on the course than those who were not. Two of these were of particular importance: course organisation and perception of teaching. An example of the differences in perception with regard to course organisation is shown in Table 4.14 in which the data reveal a significant association between thinking about leaving and satisfaction with the number of scheduled class hours ($\chi^2 = 37.70$, df = 4, p < .001).

Table 4.14. Satisfaction with number of scheduled class hours and considering leaving the course.

Considered leaving?	Too much	Just right	Too little
Never (N=620)	27.1	69.4	3.5
Not any longer (N=371)	34.8	62.3	3.0
Still/want to leave (N=345)	44.1	49.9	6.1

As well as perceived differences with regard to number of scheduled hours, there were major differences between those who had or were considering leaving and those who had not thought about this in their perceptions of teaching. It is evident from Table 4.15 that satisfaction with overall quality of instruction is significantly related to having considering leaving the course ($\chi^2 = 77.34$, df = 8, p < .001). Nearly three-quarters of the students who had never considered leaving indicated that they

were satisfied or very satisfied with the quality of instruction, while this was true of only half of those who still considered leaving.

Some of the problems experienced by students who considered leaving are revealed in their perceptions of the approachability and availability of teaching staff. As can be seen from Table 4.15, there is a strong association between thinking about leaving and perception of the approachability of staff ($\chi^2 = 92.17$, df = 8, p < .001). About two-thirds of those who had never thought about leaving were satisfied/very satisfied with the ease with which they could approach staff compared with only two-fifths of those still thinking about leaving. In contrast, nearly one-quarter of those who were still thinking about leaving were dissatisfied with the approachability of staff, while only 8% of the students who had never thought of leaving took this view.

Considered leaving?	Very dissat.	Dissat.	Neutral	Sat.	Very sat.	
Satisfaction with overall quality of instruction						
Never (N=613)	2.0	2.6	21.2	55.8	18.4	
No longer (N=372)	1.6	3.5	32.3	43.8	18.8	
Still/want to (N=345)	4.6	10.1	34.8	39.4	11.0	
	Availability	of teaching	staff			
Never (N=613)	2.6	6.9	30.5	46.0	14.0	
No longer (N=373)	2.9	6.2	42.9	32.7	15.3	
Still/want to (N=346)	4.6	9.2	39.3	35.0	11.8	
Enthusiasm of teaching staff						
Never (N=613)	2.3	6.0	28.4	46.7	16.6	
No longer (N=373)	2.7	11.3	30.6	38.3	17.2	
Still/want to (N=344)	7.0	15.4	33.7	33.4	10.5	
Approachability of teaching staff						
Never (N=611)	2.0	5.9	25.5	45.7	20.9	
No longer (N=372)	3.8	13.2	26.3	37.6	19.1	
Still/want to (N=347)	11.2	15.6	30.5	32.9	9.8	

Table 4.15. Perception of aspects of teaching/staff and considering leaving the course.

A pattern of results which is broadly similar to that for approachability is found for students' perception of the enthusiasm of teaching staff. This association is also highly significant ($\chi^2 = 54.29$, df = 8, p < .001). Finally, an association was found between students' intentions regarding leaving and the perceived availability of teaching staff, and while this association is somewhat weaker than for approachability and enthusiasm, it is nevertheless highly significant ($\chi^2 = 30.86$, df = 8, p < .001). A reciprocal relationship might be expected between considering leaving college and attendance at lectures. Students whose attendance was poor might be expected to be inclined to leave, while students who are thinking about leaving might be less committed to their course resulting in poor attendance. It can be seen from Table 4.16 that attendance at classes is in fact related to desire to leave ($\chi^2 = 31.22$, df = 2 p < .001). While the majority in each group indicated that they had not attended all of their classes in the week prior to the survey, more than four-fifths of students who were still thinking about leaving or wanted to leave reported that they had missed classes (82.1%), while the corresponding figure for students who had never thought of leaving was just two-thirds.

Considered leaving?	Attended all	Did not attend all
	classes	classes
Never (N=620)	34.0	66.0
Not any longer (N=372)	33.3	66.7
Still/want to leave (N=347)	17.9	82.1

Table 4.16. Attendance in the week prior to the survey considering leaving the course.

As in the case of attendance, an association between attitudes to the course being attended and thinking about leaving might be expected. Such attitudes might be expected to result from and also to be cause of thinking about leaving. Table 4.17 shows the association for five attitudinal items. For each one, the association is substantial and statistically significant. For example, over 86% of students who had agreed with the statement that they were glad to be attending college never wanted to leave, while this was true of only just over 50% of students who still wanted to leave. On the other hand, over 14% of students who still wanted to leave disagreed with this statement compared to less than 2% of those who had never thought of leaving. The association of this item with thinking about leaving is significant ($\chi^2 = 198.33$, df = 8, p < .001).

Considered leaving?	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	
	I'm glad I	m attending	this college			
Never (N=620)	ever (N=620) 0.6 1.1 11.8 47.1 3					
No longer (N=374)	0.5	1.9	17.4	51.6	28.6	
Still/want to (N=346)	4.0	10.1	34.4	39.9	11.6	
	I'm glad I'	m enrolled o	on this course			
Never (N=616)	0.2	0.5	10.1	46.4	42.9	
No longer (N=373)	0.3	3.2	22.3	52.5	21.7	
Still/want to (N=344)	4.9	16.0	40.1	33.4	5.5	
	I am in	terested in n	ny course			
Never (N=618)	0.2	1.0	7.8	47.2	43.9	
No longer (N=374)	0.3	1.1	17.1	53.7	27.8	
Still/want to (N=344)	5.2	9.3	35.5	39.0	11.0	
I would rather be at college than anything else						
Never (N=612)	3.6	7.4	26.6	31.0	31.4	
No longer (N=375)	3.7	11.2	36.5	26.7	21.9	
Still/want to (N=345)	16.5	25.2	27.5	18.8	11.9	
I can relate course material to my career goals						
Never (N=614)	1.1	4.4	24.9	44.6	24.9	
No longer (N=370)	1.9	3.8	32.4	41.1	20.8	
Still/want to (N=342)	8.8	12.3	38.0	30.7	10.2	

Table 4.17. Attitudes to college/course and considering leaving the course.

CONCLUSION

It will be recalled from Chapter 1 that certain factors have consistently been shown to be associated with dropping out from colleges similar to Institutes of Technology. Broadly, these factors can be categorised into those that operate before students come to college and those that are influential when students are in college. By dividing students into broad categories based on whether or not they had considered leaving their course, it can be seen that these factors differentiate between students who had never considered leaving and those who had.

With regard to preparation/pre-entry, it would seem that two factors are extremely important. The first has to do with interest in the subject matter of the course as a reason for selecting a particular course. This was shown to differentiate significantly between those had thought of dropping out and those who had not. Another important factor has to do with having an adequate understanding of what the course entails. Students who had considered leaving indicated that they a much less satisfactory understanding than those who had not. A related point is that many students considered that not having taken a subject in school an important factor in the difficulties that they encountered later on.

It might be considered surprising that choice position in the CAO form was only weakly associated with having considering leaving. However, this measure is a weak indication of choice, since there are separate lists for degrees and Diplomas / Certificates. Thus, the measure of choice is relative only to other courses in the IT sector. It also noteworthy that higher student aspirations were associated with not having thought about leaving, although as in the case of a number of other factors, this may reflect rather than be a cause of students' thinking about leaving.

With regard to students' experience in college, a number of factors were found to be associated with considering leaving. As might be expected given the importance of readiness for courses, a major factor was the extent to which students' expectations were realised in their experiences on the course. The match between expectations and the workload and difficulty of courses was especially important. Students' perceptions of teaching staff were also associated with thinking about leaving. In particular, the extent to which teaching staff were perceived to be approachable, available and enthusiastic was quite important. This finding may link with recent literature showing that students' perception of their belongingness to an institution is a major influence on their commitment and indirectly on their achievement (Osterman, 2000). In particular, there is evidence that students' sense of acceptance within the institutional community is an important factor in engagement in the institution and by implication for completion of courses (Hargreaves, Earl & Ryan, 1996).

It should be recognised that there are important limitations in the data presented in this chapter. For one thing, the information presented is retrospective. Students were being asked to indicate their expectations, aspirations, beliefs and attitudes which they had **before** they came to college, when they were half way through first year. A second limitation is that the division of students that has been utilised in this chapter was based on **thinking** about leaving, rather than actual departure. Nevertheless, the extent to which the data link in with the findings in other studies testifies to their value in exploring the causes of leaving.

5. INTERVIEWS WITH IT STAFF

Staff at the selected Institutes of Technology (Athlone, Carlow, Dundalk, Galway-Mayo, Letterkenny, Limerick and Waterford) were asked a series of questions in interview relating to the following topics: students' preparedness for college, student induction, course-related factors, financial considerations, and student services and facilities.

PREPAREDNESS FOR COLLEGE

None of those interviewed believed that students were well prepared for college life. Four main issues were cited: transition problems; personal development; poor understanding of the course; and poor study skills.

Transition Problems

Difficulty adjusting to college was a problem highlighted by many of the staff interviewed. In their view, first year students felt overwhelmed, especially if they were living away from home for the first time. They were socially ill-prepared, and unable to manage basic housekeeping, money or alcohol. Students were considered to cope better if they stayed in digs rather than in a rented flat or room in a house as this provided some structure (at least regarding time and meals). When staff were asked if they thought students had a good understanding of the demands of student life, they said that many had the attitude that college was for recreational purposes only and often spent the initial weeks of term lost in a haze, socializing excessively. The independence permitted in third-level institutions meant that students were overwhelmed by the whole 'college experience'. Freedom or lack of restriction, coupled with poor time-management skills and inability to apportion appropriate amounts of time to tasks, meant that early scheduled classes were often missed. If students only had a couple of classes on a day, with large gaps between them, they were likely to miss the whole day altogether. Interviewees also said that students' level of immaturity (particularly among male students) meant that suggestions of study skills or time management courses were usually laughed at. They felt strongly that a transitional period was badly needed to ease the move from a strictly controlled second-level environment to a situation where there was much less staff direction and students had to rely much more on themselves.

Personal Development

A number of interviewees (especially those in Business Studies and Office Information Systems) mentioned issues of personal development, particularly low self-esteem amongst their students. Many felt that this probably stemmed from the treatment students had experienced in secondary school. Interviewees perceived an inequitable distribution of teaching resources among students at second-level. Those in higher streams were allocated the most experienced teachers, while those in lower streams (typically their future students) were allocated less experienced teachers. They felt that much more could be done at second-level to prepare such students for college. While it was felt that students were more than academically able for their course, many seemed to have little confidence in their own ability. The problem, at least to some extent, seemed attributable to the fact that their students may not have achieved particularly high points in the Leaving Certificate Examination and were likely to be enrolled on a course that was not their first choice. Staff proposed that 6th year students would benefit from a personal development course or a year out before starting college to consider career options.

Poor Understanding of the Course

Few interviewees believed that students had a good understanding of what their course involved before they applied. The majority felt that while the prospectus description of courses was adequate, most students only researched their first or second choice, while the course on which they were actually enrolled was likely to have been lower on their CAO/CAS list. However, a number of interviewees felt that the prospectus on its own was insufficient as it only provided an outline of what the course would be like, and suggested that students also visit the IT (e.g., during an open day) and obtain good careers advice. In contrast, other interviewees felt many of the students on open days could use their time better by talking to staff and learning about course options. An even better use of resources would be for colleges to give career guidance teachers a good understanding of what courses involved, and they in turn could pass this information on to students. All staff were in agreement that more career guidance was needed in schools as students did not seem capable of researching the wide variety of courses themselves. While it was agreed that the internet is becoming increasingly more important as a means of conveying information about courses, one IT website was criticised as being 'primitive'. Interviewees felt that it would be difficult for students to understand what was involved in a course from the information available.

In general, interviewees felt that a lot of students lacked the motivation to thoroughly research the courses they were applying for. For example, Science staff said that students often expressed surprise on discovering that they had to study Physics as a subject when they had applied for a Biology course, or that, in Business Studies, they might have to take German as a subject. Some interviewees felt that a number of students picked courses because of a perception that jobs would be easily obtained afterwards (this was especially true for Computers and Electronics students), rather than because the course related to their interests or skills. Students also tended to choose courses listed on the CAO/CAS on the basis of the points that they anticipated they would achieve in the Leaving Certificate Examination. Rather than applying for what might be a lower points course because it genuinely interested them, they were choosing a course that they really did not want, and this eventually led to drop out.

Poor Study Skills

Another major difficulty cited by a majority of staff across all courses relating to students' preparation for college was students' lack of ability to apply themselves to their coursework. The view was expressed that secondary school did not prepare students for independent learning. At school, students studied because they were given homework which would be checked the next day. Now that they were in college, they did not seem to understand that they should attend lectures and study for their own benefit and that nobody would be there to check up on them. The example was given of students demanding to know exactly what chapter of a book to read, or if a particular topic was going to be on the exam paper. Many students were considered too nervous to speak up and contribute their opinions in a discussion group. While some did not know how to study outside of class, others just did not have the discipline. Some students had difficulty taking notes, and since lecturing was a completely different method of delivery for them, they needed support and help in setting up a study plan and in developing techniques of learning.

Suggestions on Improving Student Preparedness for College

The majority of staff interviewed across the six courses were in agreement on five main areas that they thought would help improve students' preparedness for college: (i) a change in methods of teaching in secondary school; (ii) improved liaison with schools (e.g., the creation of a stronger link with those involved in career guidance, notably in the case of Construction Studies, in which a need was perceived for more up-to-date information/career guidance); (iii) the need for more students to visit the college during an open day and to receive fact sheets on courses etc; (iv) the need for students to have a role model, to meet and talk to (e.g., recently graduated students who were successful in their field of expertise); and (v) the need to improve students' literacy and study/research skills.

STUDENT INDUCTION

When interviewees were asked if they thought that their college provided an adequate induction for first year students, the majority said that they did. However, this initial response was at odds with what they went on to say in the course of the interview. The overwhelming impression given was that the college was making an effort which they did not want to criticise, but they still felt that there was yet some way to go.

While some staff admitted that they did not know a lot about college induction, most ITs appeared to offer on average two to three days of induction (one-off) at the start of the academic year. Induction generally included introduction to the course (talks by Heads of Departments, description of course requirements), timetabling issues, tours of college including library and other facilities/student services. It was apparent that very few included study skills or time management components in their induction. When asked about the possibility of 'catch-up courses' (e.g. introductory courses for students who had not taken Physics in their Leaving Cert.), some staff were not very enthusiastic, saying the teaching hours would have to be sorted out.

One of the main criticisms of the induction was the fact that students were bombarded with far too much factual information. It was also felt that students were introduced to too many staff in too short a space of time to remember everybody and their role. Another criticism was that students arriving on 2nd and 3rd round CAO offers who had missed the initial induction were often left on their own to navigate around campus. Staff felt that there was a special need to target students in very large classes where many often feel anonymous, lost and intimidated. Although they acknowledged that "icebreakers" were sometimes organized, many students considered these to be artificial and subsequently the atmosphere could be a bit forced and false. Interviewees admitted that induction was getting better each year but they felt that it should be spread over a number of weeks so that they could meet students one-to-one in something similar to a mentoring system. However, they also pointed out that the

students who needed this kind of contact usually did not turn up when it was put in place.

As a model of good practice, Construction Studies had set up their own course induction. As part of this process, staff had the opportunity to interview each student informally and hold talks on course organisation etc. Construction Studies also had a number of posters with each staff name, title and role, office number and photo around the Department area. Staff admitted that they would prefer to get started into classes 48 hours into term, as they felt students were already starting to disappear during induction. They got the impression that students did not want to be listening to lots of people talking and they suggested that perhaps two/three refresher sessions of induction six weeks into term would be more beneficial.

COURSE-RELATED FACTORS

Four main course-related factors emerged from the interviews: lack of background subject knowledge, lack of motivation or interest, timetable/attendance issues and, staff-student contact.

Lack of Background Subject Knowledge

College staff were asked if there were aspects to their course that they believed were problematic for students. In terms of background knowledge in specific subject matter, it was immediately apparent that some students studying all six courses had difficulties with maths. Many students were considered to have only the most basic maths skills and sometimes had no knowledge of topics that were compulsory parts of the Leaving Certificate syllabus. Business Studies and Office Information Studies staff reported that their students seemed to have one hundred percent faith in the calculator with some having no concept of figures at all! As a result, maths taught in first year was generally pitched at a basic level to cater for such students, which meant that the rest of the class (those with a good knowledge of maths) thought that they did not need to attend. As a consequence of not studying, this group, despite their prior knowledge also tended to do badly at exam time. With regard to other subjects specific to course types, Science staff mentioned Physiology as a potential problem, Accounting was mentioned by Business Studies and Office Information Systems staff, Structures and Environmental Science was mentioned by Construction Studies staff and Electronics staff mentioned Physics.

Lack of Motivation or Interest

Despite the fact that college staff felt that, in general, students' written and verbal communication skills were poor, almost all agreed that the students were more than academically able for their courses. The majority noted that while some subjects were new to students they were taught at a very basic level tutorials were available as a backup. They felt that if the students were interested enough that they would be able to cope; however, students often lacked application and commitment to their studies. Students who lacked subject knowledge used it as an excuse for their difficulty in the course when the problem was that they were not putting in the effort. If students read, took notes, completed assignments and attended lectures they could easily cope. It was also noted that some students had difficulties with project work; specifically they did not understand that the work to be put into a project should be proportional to the marks allocated. Thus some students would spend weeks on a project that counted only for 5% of the overall marks, but would not study for an exam that counted for 20%.

Timetabling Issues

Interviewees were asked if they thought students were generally happy with how their timetable was organised. In response, the majority of staff said that very few students were turning up for classes scheduled on either Monday mornings or Friday afternoons. They described how students approached them to try and rearrange the timetable so that they could have at least one day off a week. Students constantly complained about Friday lectures, presumably because they wanted to go out late on Thursday night or get a bus home on Friday afternoon. If Friday lectures were cancelled, students would probably start complaining about Thursday lectures. Fitting approximately 20 hours of classes into a week was very difficult given the limited time available.

Some interviewees said that students did not like gaps in their timetable and wanted all classes compressed together so they could have a short day at college . However, the main problem, as the staff saw it, was that students did not know how to use their free time to study. On days where there were breaks in the timetable, the less focused students were likely to go home and not return for later classes. Ultimately. they felt that the students' time management skills were the main issue, rather than bad timetabling.

When the interviewees were asked if they thought there were sufficient timetabled lectures, labs or tutorials, they reported that there were. They also said that they saw no point in scheduling extra contact hours since students did not even attend their current classes. On the other hand, if the number of contact hours were reduced, students would not use their free time to go to the library to read.

Interviewees reported that attendance had seriously deteriorated over the past number of years, probably because student grants were no longer dependent on attendance. Not enforcing the attendance rule was absolutely detrimental to subjects such as Science, at which attendance at practicals was essential. More firmness was needed, the rules were bent far too often, and there was a lack of consistency in their application.

Staff-Student Contact

When asked about staff-student contact, all staff felt that this was a very positive feature of their particular college. All perceived themselves and their colleagues to be very approachable and student-friendly. While a certain amount of time was set aside each week to discuss problems (academic or personal) that students might have, students were always free to call into staff offices at any time of the week without an appointment. Staff were known on a first name basis and in some colleges photos were posted on a board in the department so that students could recognise them. Some staff took lunch in the canteen with students, or sometimes joined them for a drink in the bar. However, due to the large number of students in first year and lack of time, it was acknowledged that it could be difficult for staff to get to know each student on an individual basis. In their experience, the students who tended to drop out were the ones who were least likely to go to them and seek help.

CHANGES THAT MIGHT REDUCE STUDENT DROP-OUT

Three key ideas were put forward by college staff when they were asked if there were any changes at course or department level that they could suggest that might reduce the numbers of students dropping out: (i) improvement of student induction and learning support; (ii) introduction of student-staff mentoring; and (iii) enforcement of the attendance rule.

Since lack of preparedness was perceived to be a huge problem, one way that the college could tackle student difficulties was through enhanced induction and learning support. Induction should be spread over a number of weeks and students with problems should be identified as early as possible. It was believed that students

would benefit greatly from a taking a general course introducing them to third level education in which they could learn basic skills (e.g., communications, computers, study skills, time management).

Staff also felt that increasing contact with students would help reduce dropout and recommended that official time be allocated to student mentoring or tutoring. Electronics staff in particular spoke of the macho culture among their overwhelmingly male student body, and recognised that it wasn't easy for females and it was difficult for many males too. They also cited problems with shared offices and said that private conversations with students were often held in corridors.

Interviewees felt that class attendance was paramount and should be the main focus of attention. Enforcing the attendance rule was mentioned as especially important by Science, Computing and Construction Studies staff who perceived a clear relationship between missing classes and dropout or failure to pass exams. In the past, students had adhered to the attendance rule because of the ESF scheme (where grant payment was a function of rate of attendance) but the link between attendance and amount of money had been abolished. All staff felt many students simply let the first term slip away without attending lectures and could not catch up. Immediate action(s) needed be taken on student non-attendance if the situation was to improve.

FINANCIAL CONSIDERATIONS

Interviewees were asked if financial considerations were involved in some students' decision to leave college. Some agreed that while this was true, it was usually only in a minority of cases, when for example, students' parents were on a low income and they had to help contribute towards the household budget.

The majority of interviewees thought that there was a high level of part-time work among first year students. They also agreed that students missing class due to work was causing them to fall behind in their course work, and acknowledged that it was a contributing factor in failing exams or not taking exams. When students did turn up for class, they were often so tired from working that they could not concentrate. Some staff said that employers did not respect student timetables, and students were sometimes told they would lose their jobs if they did not work when requested. Employers did not give students time off before exams, which would have allowed many to catch up on some of the study that they had missed.

In the opinion of the majority of those interviewed, students were taking up part-time jobs to fund a certain type of lifestyle, working for extras (expensive clothes,

mobile phones, alcohol) not to pay rent or buy textbooks. Students were considered to be working longer hours than they had to, and coursework was suffering. Students could not work long hours and study at the same time and generally it was college that was dropped rather than work, as students did not see the point of staying in college for two or three year to obtain a Certificate or Diploma as they could easily get a job without qualifications. The overwhelming belief was that part-time work was having a serious impact on the integration of students to college life as the attraction of leaving college and getting a full-time and well-paid job was ever-present.

STUDENT SERVICES AND FACILITIES

In general, college staff expressed satisfaction with the adequacy of the services and facilities provided by the college for students. It was noted that students had access to a nurse, a doctor, and a counsellor, though it was acknowledged that the student counsellor was often overworked. Issues relating to lack of privacy in some colleges were raised, as counsellors had no waiting room and students had to sit outside the office which was often in a busy location. It was felt that this might prevent some students from availing of the counselling services. Some of the staff interviewed felt that some students would benefit if more academic support was available, specifically, the services of an educational psychologist, someone who could help motivate students. While there were a lot of student societies in operation, students did not support them and did not appreciate the benefits that could be gained from involvement. A number of complaints were made about the lack of sports facilities, and colleges that had facilities often limited the times they could be used.

Library

Staff at GMIT-G said that there were plans for a new library, while new library facilities had recently been opened in Dundalk and Waterford. In general, library facilities were considered to be very good, but were under-utilised, except during exam time. A need was expressed for more reading rooms, more printers, and photocopying machines. The problem of students using the library to socialise needed to be addressed immediately.

Canteen

The interviewees thought that the range of food available in the canteen was reasonable, if rather expensive for students. Limited opening hours at lunchtime were

raised as an issue. Some interviewees voiced concern about the cleanliness of some canteens, the difficulty of getting a seat at peak times, and huge delays in the queue.

Computer Facilities

Computing, Business Studies and Electronics staff in particular raised the problem of lack of availability of adequate computers and printers. There were a limited number of computer lab times allocated to their students and outside of these timetabled hours it was nearly impossible for students to gain access. Students' inability to access PCs outside of scheduled class time was in part due to the availability of unlimited internet access on all PCs (causing a lot of PCs to be used for their entertainment use only) and consequently many students were finding it difficult to access computers to do project work. It was recommended that a certain amount of computers should be designated internet-free making them more likely to be available to students who needed them for course work. Purchasing more computers, modernising existing computers and introducing a better scheduling/computer booking system would also help resolve some difficulties.

Teaching Facilities

The majority of staff interviewed considered the teaching facilities available to them 'basic'. They pointed out that since many of their students were relatively poor achievers in the Leaving Certificate, they needed more resources to achieve the same completion rates as ITs with a more academically successful intake. They pointed to the need for more digital projectors/overheads/multimedia equipment for presentations, blinds on windows, and thermostatically controlled heating that worked. A shortage of rooms in college meant that some staff had to teach in what were supposed to be temporary constructions but had been there for years. The size of rooms was also mentioned as a problem; they were either too big or too small.

Tutorials

Staff at some ITs felt that more tutorial facilities were needed as many previously available rooms were being used for lectures. They felt that tutorials were a good way of reaching weaker students or those who had not done a particular subject in secondary school. However, they felt that they were fighting a losing battle with tutorials as, since they were not an essential part of courses, students were not turning up. Tutorials when held invariably turned into lectures, as students wanted handouts and to be told what to study.

Accommodation

Of those interviewed, GMIT was the only college offering on-campus student accomodation to its general student population and this was a relatively new development for them. None of the interviewees felt that there was a major problem in sourcing affordable accommodation as there seemed to be lots of digs/rented houses close to college. They added however that they were not really the right people to provide information on this matter. Interviewees also thought that expensive accommodation and paying the rent in itself were unlikely to be the main problem. Maintaining their expensive lifestyle was more likely to give rise to financial problems.

Transportation

When asked if their college was easily accessible, all interviewees said that their colleges were well served and easily reached by private and public transport. However, while accessibility was not considered as a problem in itself, the majority of staff pointed out that private buses started picking up students very early (midday) on Fridays, and this had serious implications for attendance at lectures.

CONCLUSION

There are several important points of similarity between the main issues raised in the interviews with the staff of the ITs and the findings in the literature on the causes of student drop-out. These have to do with preparation and readiness for college and courses, the learning experiences of students, and college support services.

Many of the staff interviewed took the view that students in general were badly prepared for college. The problem of transition from second to third-level was considered to raise problems regarding study skills, time management, and the more general issue of self-direction, which is a major feature of higher education. Many staff thought that students lacked the sense of efficacy that they could manage these important tasks in their new lives.

Inadequate preparation for, and background information on, the specific courses that students were embarking on was also an important feature. The fact that there are so many courses that students can choose from, coupled with the difficulty of accessing adequate and up-to-date information, was thought to be a major factor in some students' lack of understanding of the course and the commitments needed to complete it.

The interviewees took the view that several initiatives would be required to address students' lack of preparation. These would range from relatively modest measures such as enhancing induction courses and having students meet recently graduated students to more long-term measures such as changing teaching methods in post-primary schools and devising ways of improving students' literacy and study skills.

In considering students' experiences of teaching and learning, there were some differences in the particular issues that emerged in staff and student views. Staff drew attention to the large number of classes that had to be accommodated in the timetable. Overall, they were quite satisfied with the organisation of the timetable and also with the number of tutorials and laboratory sessions provided. There was also broad agreement that staff in their particular institution were very approachable and friendly. Students, however, were more critical of these aspects of college life.

6. DISCUSSION AND RECOMMENDATIONS

In this chapter, factors found in our study of non-completion in Institutes of Technology to be associated with student dissatisfaction and with the desire to leave college are outlined. The factors are grouped under the broad headings of personal characteristics and family background, preparedness for college, understanding of the academic requirements of college, the quality of a student's experience of college, and financial considerations. To place the findings in context, comparisons are made with the findings of previous research in Irish ITs and with research based on university students. The concluding part of the chapter presents recommendations to address some of the factors that may contribute to a high non-completion rate.

WHO WANTED TO LEAVE?

Most of the students who responded to our questionnaire were glad to be attending their chosen college and course and said that the experience of college had met or surpassed their expectations. Nonetheless, more than half had considered dropping out of their course at some stage, and one quarter still sometimes thought about leaving or definitely wanted to leave at the time of the survey. At least half of the students on each course type had considered leaving, as had almost half of students in each institution. Given that members of IT staff who had been interviewed indicated that many students had already dropped out by the time the survey was conducted, this suggests an alarmingly high proportion of students in ITs who have either dropped out or were considering doing so.

The proportion of students who were considering leaving varied considerably by course and the institution they were attending. For example, three-quarters of Computing students in Cork, compared to just under half of their counterparts in GMIT-C, had thought of leaving. The disparity was even greater for Construction Studies students, of whom almost four in five students in GMIT-C indicated that they had considered leaving, compared to one-third of students in Tralee. There were similar variations among colleges for courses in Electronics, Office Information Systems, and Science. The course with the highest proportion of students who at least sometimes still considered leaving was Construction Studies in GMIT-C, where almost two-thirds indicated that they still sometimes thought about leaving their course.

Family Responsibilities

Family responsibilities were not an issue for the majority of female IT students surveyed, as very few were the main carer for a dependent child or adult, and fewer still lived with their child or children. Unusually, there were no significant differences in the proportion of males and females who were main carers. Main carers were no more likely to have considered dropping out than students with no caring responsibilities. This is not to suggest that carer's responsibilities did not cause difficulties; over one-third indicated that they missed classes at least occasionally due to problems with childcare arrangements, and over half said that they had difficulty in financing arrangements.

Age

Students aged 21 and over were less likely than younger students to say that they had considered leaving their course. A large majority of students aged 21 years and older were single and childless, and a majority were not employed. Consequently, external obligations exerted less of an influence than might typically be expected.

Gender

No gender differences were found in students' intentions to leave their courses. It may be, of course, that more males than females had already left their course by the time the survey was conducted. In general, females appeared to have had more prior knowledge about their course than males. They were more likely to have received help or guidance with their course choice, to rate the academic reputation of the college higher and to express the belief that the college offered the best course in their chosen discipline. They were also more likely to indicate that the college prospectus, newspapers and open days were important sources of information in their course choice. Despite this, a greater proportion of males than of females said that they had a good prior understanding of their course, and that they had no difficulty with their course work.

It is difficult to interpret these somewhat conflicting pieces of data, especially in light of the fact that a greater proportion of females than males complete their courses. It may be that male students were less willing to admit that they did not really understand what their course would be like or that they were having academic difficulties. Certainly they were less likely than females to admit to feelings of isolation, either initially or at the time of the survey. Comments from some lecturing

staff suggest that because of immaturity males are less likely to avail of extra support, such as study skills classes. If it is the case that male students feel they should not admit to weaknesses or difficulties, this might partly explain the lack of gender differences in reported intentions to leave. If this interpretation is correct, it would have implications for the uptake of support services by male students, who may be less willing than female students to seek advice or help, and consequently, may be at greater risk of dropout.

Living Arrangements

Over half the students in our survey indicated that they lived at home with their parents during the academic year. The next most commonly reported living arrangement was in rented accommodation shared with other students. There are no significant differences by living arrangements in the proportions of students who had considered leaving their course, but missing classes due to transportation problems is significantly related to living arrangements. Students living in digs had the lowest proportion of respondents indicating that they either frequently or occasionally missed classes, while those living in the parental home or their own home had the highest proportion. In Tallaght IT, close to half of students (almost all of whom lived in the parental home) said that they missed classes at least occasionally due to transport problems. Thus, the advantages students may gain from living in the parental home may be counterbalanced by other factors, such as greater distance to travel.

Parental Educational Attainment and Social Class

Few respondents' parents had received a third-level qualification of any kind and there was only a very slight association between paternal (but not maternal) educational attainment and the likelihood of considering leaving the course. Neither maternal nor paternal social class was related to the expressed desire to leave college. This contrasts with Healy et al.'s (1999) finding that IT students with fathers in the 'professional workers, employers and managers', 'salaried and non-manual workers' and 'skilled manual workers' categories were more likely to leave their course than were students with fathers in the 'farmers and other agricultural workers' and 'semi-skilled, unskilled manual workers' categories.

The lack of a significant relationship between maternal or paternal social class and considering leaving the course may be, in part at least, a function of our classification procedure. The proportion of respondents' parents in our survey who were classified as Social Class 5 or 6 was smaller than in the general population; it was also smaller for Social Classes 1 and 2. This may partly be because 15% of fathers in our survey were classified as "farmers" (standard social classes could not be assigned to farmers without knowledge of acreage).

PREPAREDNESS FOR COLLEGE

Lack of preparedness is associated with unrealistic expectations of college life. It reflects a dependence on inadequate sources of information about higher education generally and institutions in particular. It would appear that many students in our survey entered third-level education very seriously under-prepared. Some experienced difficulty because they had not taken relevant subjects in post-primary school, some had put insufficient thought into the selection of their course or college, while others appeared to have had unreal expectations about college life.

Post-Primary School Subject Choices

Half of respondents said that they had difficulty with their course because they had not taken certain subjects in school. This difficulty was associated with whether or not students had considered leaving. Students taking Science were most likely to report difficulty because they had not taken a subject in school, while Computing students were least likely to indicate that this was a problem. However, interviews with staff presented a slightly different picture. While they agreed that studying certain subjects specific to their courses would have been helpful, most felt that the level at which lectures were pitched was appropriate even for students who had not taken a subject at school.

In the view of lecturers, mathematics was the area in which students had most difficulties. Some believed that students appeared to have little or no grasp even of areas that formed part of the core Leaving Certificate curriculum. As a result, classes had to be pitched at Leaving Certificate level. A consequence of this was that students who had an adequate Leaving Certificate-level knowledge of mathematics did not bother to attend classes. Since all post-primary students take mathematics as a subject, subject-specific difficulties may not simply be a matter of whether or not a student had taken the subject for Leaving Certificate. It may be that, in an attempt to maximise examination success, some students (and teachers) focus on a small number of topics in the mathematics curriculum, ignoring other topics completely. While this strategy may help them to pass their Leaving Certificate examination, leads to problems in college.

Selection of Course/College

Some of the information available from colleges which might have helped students make choices about colleges and courses was vague, outdated and inaccurate. The quality of course-related information available from college websites was variable in the extreme, while the quality of college prospectuses also varied, although not to the same extent as the websites.

In our study, staff disagreed about the benefits of the prospectus. Some felt that the prospectus alone provided insufficient information on which to base a choice, as it only gave a course outline and needed to be used in conjunction with a visit during an open day. Others suggested that careers guidance should be the main source of students' information about courses. Staff also pointed out that some students clearly did not read the course description in the prospectus, citing in support of this view the fact that some Science students who hoped to specialise in Biology had expressed surprise that they had to study Physics also (though this was stated in the course description).

In our survey, students indicated that the prospectus was the most important source of their information on colleges and courses. However, one in ten said that a college prospectus had been an unimportant source of information when deciding on the course or college they wanted to attend. A large majority rated interest in the subject as important in their course selection. However, location was the most important consideration for selection of college, more important than the academic reputation of the college. Almost one quarter said that having friends who planned to attend the same college was an important factor in their choice.

As in Healy et al.'s (1999) study, just under half of students said that they had not received any guidance or help in choosing their course and, of those that had received guidance, only approximately two-thirds said that a guidance counsellor had been their main source of advice. Not having received any form of help or guidance was associated with the desire to leave. Staff were of the view that the amount of career guidance available to prospective IT students was poor, and felt that greater availability of guidance would reduce the number of students making poor course choices.

The basis on which students made their choice of course and college was related to whether or not they had considered dropping out. Those who said that the academic reputation of the college and the fact that it offered the best course in their

chosen discipline had been important factors in their decision to enrol at their IT were less likely to have considered leaving their course. In contrast, students who wanted to leave their course were more likely to have chosen their IT because they had friends starting there or had been persuaded to do so by their parents. Furthermore, students who wanted to leave were much less likely than those who had never considered leaving to say that interest in a subject had been an important factor in their decision to choose their course.

A majority of students in our survey were enrolled on their first choice course, with very few enrolled on their fifth or lower course choice. Electronics and Office Information Systems students were significantly more likely than Construction Studies and Business Studies students to have obtained their preferred course. In light of the findings of other studies that a major factor influencing students' chances of completing is whether or not they had obtained their preferred choice of course (Healy et al., 1999; Ozga & Sukhnandan, 1998), it was not surprising that there was an association in our study between whether students had considered leaving and where the course they were currently enrolled on was positioned in their list of CAO preferences.

Despite the fact that a high proportion of students were enrolled on their first choice course, just one in ten indicated that they had a good understanding of what their course would be like before they applied. It is clear from our study that such an understanding is important, as a poor understanding was found to be significantly associated with thoughts of leaving. One-quarter of those who had considered leaving their course cited lack of interest in the course, with responses ranging from almost 30% of Office Information Systems students to approximately one in ten Electronics students.

UNDERSTANDING OF ACADEMIC REQUIREMENTS

Results from our survey suggest that many students experienced a gap between their expectation and experience of college.

Workload

One in three students said that their course workload was greater than they had expected; four out of five said that they had some or great difficulty with course work; and one in eight that their college experience was worse than expected. Not surprisingly, students who were thinking of leaving were most likely to report that their college experience had been worse than expected, that they were having difficulty

with their course work, and that their workload was greater than expected. When students who had considered or were considering leaving their course were asked why they wanted to do so, almost one-third gave reasons relating to the difficulty of the course/subject or the unexpectedly heavy workload. Responses varied by course type; more than half of Electronics and Computing students, but only approximately one in seven Business Studies students who considered leaving their course cited subject difficulty or workload as the reason.

Study Skills

Students study habits, time management skills, skills in reading, writing, note-taking, preparing papers, and preparing for exams were raised by lecturing staff during the course of interviews. Staff agreed that students were more than academically able for their course, but felt that they lacked the interest or commitment to succeed. While acknowledging that lecturing was a completely new style of learning and that some students might have difficulty taking notes, they felt that some did not have the interest, techniques, or motivation for independent study. They recommended that academic supports be put in place to help smooth the transition from the 'spoon-fed' approach that existed at secondary school, and that students be shown how to organise a study plan for themselves.

Staff expressed the view that many students used course difficulty as an excuse for not putting time and effort into studying. In this respect, IT lecturers echoed the findings of Killen's (1994) study in which university students' average study time equalled just over half of the time that lecturers expected them to spend studying.

Student responses in our study support the staff's view that students spend insufficient time studying. More than four in ten students said that they spent less than five hours a week (the lowest category offered to them) studying. Given that these figures include time spent on class work such as projects and essays, and that the study was carried out relatively late in the academic year, they may be taken as evidence that the many IT students spend little time studying.

Absenteeism

Seven in ten students in our survey said that they had not attended all their classes in the week before they were surveyed. The proportion of those who were still thinking about leaving or who wanted to leave that reported that they had missed classes was significantly greater. Attendance varied across colleges, with more than three-quarters of students in Athlone, Dundalk, Letterkenny and Tallaght missing some classes,

compared to 38% of students in Waterford. There were also variations by course type, with only one in five Business Studies students attending all classes, compared to almost half of Electronics students.

Absenteeism was perceived by staff to be a major problem. They felt that attendance had seriously deteriorated in recent years, probably because student grants were no longer dependent on attendance. While they constantly impressed on students the importance of regular attendance, they felt that many did not see the connection between attendance and the ability to keep up with course work. Attendance was a particular problem at classes on Monday mornings and Friday afternoons, which, in turn, created timetabling difficulties. Staff explanations for not turning up for classes related to working, excessive tiredness after a previous night socializing, and the fact that there were large gaps between classes with the result that students took the whole day off instead of using free time for studying. The reasons students most frequently offered for missing class were illness, followed by tiredness/oversleeping and laziness.

THE QUALITY OF THE STUDENT EXPERIENCE

A large majority of students in our survey agreed that they were glad to be attending college and would rather be at college than doing anything else; they were glad to be enrolled on their course, were interested in it and could relate their course material to their career goals. However, students who were considering leaving their course were much less likely to express these sentiments. There was considerable variation in satisfaction with teaching staff, course organisation, college facilities, and in the degree to which students were involved in college life.

Teaching Staff

Our survey examined student satisfaction both with the initial introduction they had received and with the ongoing quality of interaction with academic staff. A majority reported that they had been given a good introduction to staff on their course, but the percentage saying this ranged from 85% of GMIT-C students to less than half of Tallaght students.

Just over half of students were satisfied with the availability, enthusiasm, and approachability of their teaching staff. A majority were also satisfied with the reliability of teaching staff and the overall quality of the instruction they provided. However, those considering leaving were much less likely to say that they were happy with the quality of instruction or with the availability, enthusiasm, and approachability of teaching staff.

Staff perceived themselves to be very approachable and student-friendly, and said that they were available to see students at any time with no prior appointment. However, they acknowledged that the large number of first year students made it difficult to get to know each one well, and admitted that they had a better relationship with their second year students. They also believed that the students most likely to drop out were the ones least likely to be known to them, as they rarely sought help before leaving. Moreover, they felt that shared staff offices were not conducive to creating an atmosphere where students could approach them about their difficulties.

Course Organisation

One-third of IT students believed that they had too many scheduled class hours, and more than one in four were not at all satisfied with how their timetable was organised. The main criticisms of course timetables concerned long time periods between scheduled classes and too many classes. Business Studies students were most likely to complain about scheduling, while Electronics students were most likely to complain about having too many scheduled classes. Overall, those who were dissatisfied with their timetable were more likely to express a desire to leave their course, as were those who believed they had too many scheduled class hours.

However, improving course organisation is not simply a matter of having fewer lectures. Almost all staff felt that students' expectations were unrealistic when it came to timetabling issues. Some said that students expected to have at least one full day off a week, while others wanted all their classes timetabled together so that there would be no gaps. Staff pointed out that it would be beneficial if more students spent their free time between classes in the library, rather than leaving the campus and missing their later class(es). However, many students referred to the lack of facilities on campus, and pointed out that there was little to do during long waits between lectures.

Differences in the views of staff and students were even more apparent for tutorials. Less than one-third of students were satisfied with the number of tutorials available to them, and the association between dissatisfaction and considering leaving was significant. All staff agreed that tutorials provided a good opportunity to reach weaker students, but believed that there was a serious problem with attendance (in particular, among weaker students). They also pointed out that tutorials could be very demoralising for staff, as it was not unusual for very few students to attend, particularly on a Monday or Friday. Consequently, they did not view student requests for more tutorials in a very positive light.

Facilities

The majority of students expressed satisfaction with lecture, laboratory and library facilities, although again, there were considerable variations between colleges. Some staff criticised the rather basic nature of some teaching facilities, pointing out that as many of their students had been poor achievers in the Leaving Certificate, they needed more, not less resources to succeed.

A majority of students were satisfied with most aspects of computing facilities, but not with the number of computers available for use. Computing, Business Studies, and Electronics staff raised the issue of insufficient numbers of computers and printers available for use by their students. Staff felt that many students were using computers for entertainment (e.g., surfing the internet), causing an apparent shortage of resources, whereas students were more likely to complain that they could not access computer laboratories outside of limited scheduled periods.

Most students felt that they had been given a good introduction to the Student Union and student clubs when they first came to college. However, when students were asked to rate their current satisfaction with various facilities, many registered unhappiness with the canteen, sports facilities, photocopying facilities, and student clubs (in spite of having received a good introduction to clubs). There was a large degree of variation between colleges, with Tallaght and Limerick students reporting significantly lower satisfaction and Waterford and Athlone students reporting significantly higher satisfaction with student facilities than students in other ITs. In contrast, most staff considered the services and facilities available to students adequate, although there were some complaints about sports facilities.

As with Healy et al.'s (1999) IT students, the facility that occasioned most complaints was the college canteen, which was typically characterized as offering poor quality food at inflated prices. While the quality of a canteen may not immediately seem to be particularly relevant to non-completion, comments from students indicated otherwise. It would seem that poor quality canteens contribute to some students leaving the campus to eat lunch, with a reasonable proportion not returning in the afternoon. Moreover, many reported missing classes due to illness or tiredness. While there may be many reasons for this, it is not unreasonable to assume that a poor quality, unvaried diet (apparently sometimes served in unhygienic circumstances) may be a contributing factor.
Participation in College Life

The present survey did not fully assess the extent to which students were integrated into college life. However, it is possible to make some inferences from the available data. Staff indicated that students did not make full use of student facilities, and that many student clubs did not get the support they merited. However, staff from some ITs felt that on-campus sports facilities were inadequate. In general, students' views of facilities were more negative than those of staff. One-third wrote suggestions for improvement, with just over 10% making suggestions along the lines that any facilities would be an improvement. The facilities that evoked greatest dissatisfaction were the canteen and student bar. Many wrote comments about the need for an on-campus bar, with some pointing out that apart from functioning as a bar, it would provide a place to pass time and meet friends. The canteen was not typically seen as a place to meet with friends. Thus, while staff felt that students were not as involved as they could be, students felt that there was little for them to get involved in. Whichever view is true, it is apparent that participation in campus-based activities does not reach the level that might be hoped for. It is probable that the relative lack of engagement in college life facilitates the disengagement process for some students.

Social Integration

Persistence in college requires students to adjust socially to their new environment and for many, this involves leaving behind the friends they made in school and developing a new set of friends. While many students often feel isolated when they first come to college, such feelings are usually only temporary. For students who find it difficult to meet new people, and especially those who are away from home for the first time, feelings of loneliness may lead to early withdrawal. Indeed, in Healy et al.'s (1999) survey of IT students 10% of non-completers gave "not knowing anyone" as a reason for their non-completion.

Just over one-third of students in our survey said that they had felt "lost" when they first came to college, while a smaller percentage said that they still felt lonely and without friends. Females were more likely than males to admit feeling isolated, either initially or at the time of the survey. Difficulty in settling into college was given as a reason for considering leaving by a small percentage of students (5.4%). Less than one-third felt that they had been given a good introduction to students on their course. Waterford was the only college where more than half of the students said this, while less than a quarter of students in Athlone, Carlow and Limerick thought so. Satisfaction with the introduction to fellow students was significantly associated with considering leaving the course, with over 90% of those who definitely wanted to leave expressing dissatisfaction with their introduction to their classmates.

While most social support probably comes from other students, since it is with each other that students have the most contact, support from family and friends can also influence a student's attitude towards college. Parental values and attitudes towards higher education play an important part in students' commitment to completing their course, and these are particularly important during the first year (Pantages & Creedon, 1978). While almost half of respondents in our survey agreed or strongly agreed that their family encouraged them to stay at college, only one-third agreed that this was true of their friends. Surprisingly, almost one-third disagreed or strongly disagreed that their familes encouraged them to stay at college, while a quarter disagreed or strongly disagreed that their parents encouraged them to stay. More females than males reported being encouraged by their friends and family to stay at their chosen IT.

FINANCIAL DIFFICULTIES AND EMPLOYMENT

The majority of students in our survey had a paid job, with a slightly greater proportion of females than males working. On average, students worked more than 16 hours a week and, surprisingly, very few felt that their job interfered with their studies (this may be because few worked during timetabled class hours). However, working outside of timetabled hours can result in missing classes due to tiredness (the second most frequently cited reason for missing classes), it encroaches upon study time, and can limit the opportunity to fully integrate into college. Students who were still thinking about leaving or wanting to leave were more likely to say that their job interfered with their studies and that they worked either frequently or occasionally during timetabled hours.

Parental or family assistance and personal savings or income were both rated as major supports in meeting college expenses, as was the student grant. Almost half of the students agreed that college and accommodation cost more than they had expected and very few agreed that their grant was sufficient. On the other hand, when asked if they thought that they did not budget their money as well as they could, many agreed.

Of those considering leaving their course, one-sixth provided financially-based reasons (wanting a job, frustration at having no money, financial difficulties) for their desire to leave. Interestingly, there were significant differences by course type in the

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proportion of students who offered financial reasons. Only 5.4% of Computing students compared to 29.5% of Office Information Systems students did so.

The staff perspective on students' finances differed somewhat from that of students. Staff believed that excessive working hours contributed to students missing class, falling behind in their course work, and was a contributing factor in failing or not taking exams and subsequent dropout. They felt that only a small number of students could not afford to continue in college without working, and believed that many worked to fund their social life and extras (such as mobile phones, clothes and cars).

RECOMMENDATIONS

In this section a number of recommendations to reduce the rate of non-completion in ITs are presented. They focus mainly on first year students, for whom high noncompletion rates may be taken as evidence of the difficulties they face in adjusting to college. Programmes designed to support this specific group are likely to be of greatest benefit in addressing the issue of non-completion. The evidence presented in this report suggests that a number of factors have a major impact on retention, viz., students' preparedness for college, their selection of courses suitable to their interests, students' experiences of courses and college, teaching practices, and the degree to which ITs can promptly identify students at risk.

Students' Preparedness for College

Retention efforts can begin even before students arrive at college. It is apparent that despite the information that is available, many students are poorly prepared for college. While admittedly much of the responsibility for gathering information must lie with the student, both post-primary schools and ITs have a significant role to play in helping students to choose the course which best suits their interests and abilities.

School Guidance Counselling Services

Many students appear to have received little assistance from guidance counsellors, with less than half of those surveyed reporting that their main source of information or guidance about their course was their school guidance counsellor. The effects of insufficient guidance counselling for post-primary students have been highlighted elsewhere. For example, the Admissions Officers Association (for Institutions of Higher Education) in their 1998 submission to the Commission on the Points System (1999) pointed out that "many students will include courses on their application form for which they are not eligible, courses in which they have absolutely no interest, courses which they have never researched and courses for which they are simply not suited. If these students had available to them the services of a full-time fully qualified guidance counsellor at the critical times then these problems would be minimised".

In 1983 the minimum enrolment required for an ex-quota guidance counsellor was doubled from 250 to 500 students. The cost of improving the counsellor-student ratio may well be offset by a reduction in non-completion rates at third level. However, the deployment of counsellor services also needs to be reviewed. In particular, students need assistance at the start of Senior Cycle, as this is the time that decisions are made about subject options that may have implications for third-level study choices. We recommend that the role of guidance counsellors in post-primary schools in assisting students make choices about third-level study be reviewed, and that whatever steps are necessary to enhance it be taken.

Information Supplied by Colleges

The prospectus was the information source most likely to be rated as important by students in their choice of college and course. However, the amount of information supplied in a college prospectus about a course is typically quite limited. We recommend that all ITs should their prospectuses to respond to the most common questions that potential students ask. For example, the prospectus should at a minimum indicate what the course is like, including subjects taken, typical amount of class contact, the types of activities engaged in (such as laboratory or field work), what interests, aptitudes, and achievements students should have, what kinds of jobs are available to those who complete the course, possible progression routes, minimum requirements, and any other relevant information. Consultation with current students should inform the content of the prospectus.

The quality of college websites was varied considerably. While some were easy to use, informative and interesting, others gave a prospective student no idea what to expect of the college or the course. It is likely that in the future college websites will become increasingly important as a source of information. We recommend that ITs significantly upgrade the quality and quantity of information (on both courses and the college itself) on their websites. As with the prospectus, a college website should provide prospective students with a comprehensive picture of what it is like to be enrolled on a given course in an IT.

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Minimum Entry Requirements

The Commission on the Points System (1999) suggested that ITs reconsider their minimum entry requirements for some courses, to ensure that students had the minimum knowledge and skills necessary for successful completion of their chosen courses. However, staff interviewed had very mixed views on the potential benefits of either raising the threshold points or making certain subjects a requirement for specific courses. Projected falls in student numbers make it unlikely that ITs will raise the points required for entry to courses. Consequently, we recommend that IT prospectuses and websites place far greater emphasis on the importance of prior experience of a subject (for example, Business Studies courses should specify that students who have not studied Accountancy at Leaving Certificate level will be at a disadvantage). Furthermore, we recommend that ITs explore the possibility of providing 'catch-up' courses for students who have not taken subjects central to their chosen course at Leaving Certificate. This would not only benefit such students, but would also benefit students who find that their college lectures are largely repeating what they had already studied for Leaving Certificate.

Students' Experience of College

Student Induction

A student induction programme is a regular feature of most course schedules for first year students. However, the one-off nature of most induction programmes, where students are bombarded with far too much factual information (much of which is immediately forgotten) over the course of one or two days is not ideal. We recommend that colleges adopt a more long-term induction strategy. This would allow those who received 2nd or 3rd round CAO offers to benefit.

As well as basic orientation information, study skills and time management should form part of all induction courses, as should a class-level social event. Efforts should be made to use the induction programme to facilitate contacts with staff and with fellow students. As a further aspect of induction, we recommend that a mentoring programme be set up to familiarise new students with the faculty and staff on their course. Each member of staff should be assigned a number of students and be their first port of call if a problem arises. The benefits of such a programme include assisting the integration of new students into college by personalising the academic environment for them, providing continuing orientation, helping new students develop basic coping skills, and improving their chances of academic success.

Learning Support Programmes

As a further response to the high attrition rate of under-prepared students, the introduction of a basic skills course/support programme would help students who are weak in areas such as mathematics, writing and reading. The focus of the programme would be academic and consist of basic-skills coursework in the area in which help was needed. We recommend that identification of students with problems take place early in the first semester and that students be given regular feedback on their progress in these areas.

Facilities

It is likely that the relatively poor facilities found in some ITs discourage students from becoming involved in campus life. In particular, the lack of a social meeting space was identified by students as a problem. We recommend that ITs ensure that they provide adequate facilities for their student body, and that new courses do not come on stream until relevant support structures and facilities are in place. We also recommend that ITs examine the creation of more social spaces, and significantly upgrade canteen facilities so that they are perceived as attractive locations by the student body. The creation of more social spaces will provide locations other than the library that students can use if they have long breaks between classes, thereby encouraging them to remain on campus. As an added benefit, it will also decrease the number of students using the library as a social space.

Record-keeping and Monitoring

In order to design and implement effective retention strategies, the nature and extent of non-completion needs to be accurately identified. We recommend that accurate progression data be collected in a manner that it is consistent, allowing comparisons between courses, institutions, and over time. These data will provide details about the timing and extent of non-completion, as well as the characteristics of students who drop out.

More immediate action is also indicated. It is unsatisfactory that in many cases staff do not realise that students have dropped out until they fail to take their exams. We recommend that course staff develop improved channels of communication about student performance and attendance, particularly during first year. Sharing of such information makes it more likely that students at risk of dropout are identified more quickly, and at a stage when help can still be usefully given. In situations where students are felt to be at risk, designated staff members (preferably a student's assigned

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mentor) should contact the students and / or their families and offer assistance as appropriate. Where students do not want to remain in college, every effort should be made to meet with them to discuss why they have reached this decision.

Teaching Practices

Teaching and lecturing is a crucial component in the experience of being a student. We recommend that consideration be given to extending courses that introduce new staff to teaching. Such courses would involve an emphasis not only on informationtransmission skills, but also on the nature of learning in higher education and the significance of social support for students.

In common with other third-level institutions, ITs have recently been concerned with matters to do with teaching and learning. Many staff are concerned with 'overteaching' to the detriment of students' private study and reflection. There is no obvious formula for determining the correct balance between formal teaching and students' private study. However, we recommend that the re-orientation of teaching should be a component of a review of procedures in the Institutes to advance the issue of how teaching and learning can improve retention rates.

Recommendations for Future Developments Within Institutes of Technology

A major implication of our recommendations is that the Institutes should give priority to ensuring an improvement in the completion rate of students. Such a priority should be seen in the context of other priorities and developments within Institutes, two of which are considered briefly here.

Demographic Changes

The recent change in the demographic structure of the population has begun to affect intake to the ITs and will have greater effects over the next decade. We recommend that the IT sector should consider the best approaches to handling this situation rather than merely compete with each other for falling student numbers. A concern with maintaining intake may not necessarily result in greater provision of the kinds of services that will enhance completion rates. We further recommend that ITs cooperate with each other relevant institutions in the provision of new courses.

Research

ITs have recently established a research profile and the promotion of both pure and applied research is a major priority in the sector. We recommend that the development of research should be considered in the context of the need to provide services that would enhance retention. In particular, it is important that due recognition be given to teaching and support services as well as to research achievements in competition for promotion.

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Appendix A

Student Satisfaction Survey

CODE _/ _/

Your Student ID Number _____

The Educational Research Centre (ERC) is conducting a Student Satisfaction Survey in Institutes of Technology. This questionnaire asks for information about your attitudes to various aspects of college life, and for some background details about yourself. The results of the survey will give valuable feedback to your Institute and will assist in the planning and organisation of courses. Therefore, completion of the questionnaire will benefit you and all other students attending Institutes of Technology.

Please be as honest as possible in your answers. The information you supply is confidential, and will be seen only by researchers at the ERC.

Thank you for your co-operation.

•	Age			
•	Gender			
	Male Male	Female		
3.	Marital status			
	Solution Not married	[®] Married	⁽⁸⁾ Other (please sp	ecity)
Liv	ing arrangements			
١.	Where do you live	during the academ	iic year?	
	In parental home In parental home	1		
	 In rented nouse/I In dios 	lat		
	In ungoIn your own house	se/flat		
	Other (Please specified) Other Other	ecify)		
	With whom do	live during the	adamia vaar9 (Dlass- 4	al all that annihi
).	No one Llive of	nve during the ac	auemic year: (Please th	ick an that apply)
	NU UIE, I live all Other students	JIIC		
	 My spouse or par 	rtner		
	My spouse of part My child or child	lren		
	 My child of child My parents 			
	My purchesOther relatives			
	8 Friends who are	not students		
	Other people (ple	ease specify)		_
	Do you ever miss cl	asses due to trans	portation problems?	
		Occasional	y ® Rarely	8 Never
7.	Are you the main c	arer for a depende	ent child or adult?	
	© Yes	& N0		
F 1	NO, go to question 1	0.		
8.	Do you ever miss cl	asses due to probl	ems with care arrange	ments?
		Occasionall	y ® Rarely	® Never
).	Do you have difficu	lties financing car	e arrangements?	
	Wery much so	Somewhat	Not really	No / Not applicable
Far	nily background			
10.	Please state the occ	upation of your pa	rent/s or guardian/s (I	f not currently employed,
	please state former of	occupation).		
	Eathor/mala guardia	n	Mother/female qua	rdian

11. What is the highest level of education attained by your parent/s or guardian/s?

Father/Male Guardian Mother/Female Guardian

Don't know	8	
Primary school	8	
Junior Certificate or equivalent®	8	
Leaving Certificate or equivalent®	8	
3 rd level Certificate or Diploma®	8	
3 rd level Degree	8	
Postgraduate qualification (e.g. MA, PhD) ®	8	

12. Which of these options reflects the employment status of your parent/s or guardian/s?

	Father/Male Guardian	Mother/Female Guardian
Employed		8
Unemployed		8
Retired/Invalidity pension		8
Working in the home		8
Other (please specify)		

Choosing your course

Scale: 1= unimportant; 2= not very important; 3= neutral; 4= somewhat important; 5= important

13. How important was each of the following factors in your decision to enrol at this IT?

	1	2	3	4	5
Academic reputation of the college	8	8	8	8	8
Location of the college	8	8	8	8	8
It offered the best course in my chosen discipline	8	8	8	8	8
Influence or wishes of parents	8	8	8	8	8
I had friends starting here	8	8	8	8	8
It was the only college that offered this course	8	8	8	8	8

14. How important was each of the following factors in your decision to choose your course?

	1	2	3	4	5
I was interested in the subject	8	8	8	8	8
My parents persuaded me to choose this course	8	8	8	8	8
My friends suggested this course	8	8	8	8	8
Teacher/guidance counsellor suggested this course.	8	8	8	8	8

15. How important was each of the following sources of information about the college and/or course before you applied?

v 11					
	1	2	3	4	5
Careers exhibition/open day	8	8	8	8	8
Newspaper	8	8	8	8	8
College prospectus	8	8	8	8	8
Internet	8	8	8	8	8

16. Was the course that you are currently enrolled on your:

8	1 st choice		8 4 th choice
8	5 th or lower choice		

17. Do you think that you understood what your course would be like before you applied?

Wery much so
 Reasonably so
 Unsure
 Not really
 Not at all

18. Did you receive any form of help or guidance with your choice of course?

8 Yes
8 No

19. If YES, from whom did you predominantly receive guidance? (Please tick one only)

- Guidance counsellor
- Other school staff
- Friends
- Parent/guardian
- Other family member
- Other (please specify)
 Other (please

20. Is this your first year in a third level institution?

21. What is the highest qualification you hope to attain?

- National Certificate
- National Diploma
- 8 Degree
- Postgraduate qualification
- Other (please specify)
 Other (please

Your experience of college

22. How has your college experience met your expectations?

- [®] Worse than I expected
- About what I expected
- ⑧ Better than I expected

23. How does your course workload compare to your expectations?

- ⑧ More than I expected
- About what I expected
- Less than I expected

24. How do you feel you cope with your course work?

- I have no difficulty with my course work
- I have some difficulties with my course work
- [®] I have a great deal of difficulty with my course work

25. Have you had difficulty with your course because you did not take certain subjects in school?

- 8 Yes
 8 No
- **27. IF NO, approximately what percentage of classes did you miss last week?** (a) <25% (b) 26-50% (c) 51-75% (c) 76%+

28. Why did you miss classes?

29. In a typical week, approximately how many hours do you spend on course work, *excluding* class time?

< 5	®	21-25	⑧
6-10	®	26-30	®
11-15	®	30+	®
16-20	8		

30. Have you ever thought about leaving your course?

- 8 Never
- [®] Yes, but I no longer think about leaving
- [®] Yes, I sometimes still think about leaving
- Yes, I want to leave

31. If YES, please outline why you have considered leaving your course.

32. To what extent would you agree with the following statements?

Scale: 1= strongly disagree; 2= disagree; 3= neutral; 4= agree; 5= strongly agree

	1	2	3	4	5
I'm glad I'm attending this college	8	8	8	8	8
I'm glad I'm enrolled on this course	8	8	8	8	8
I am interested in my course	8	8	8	8	8
I would rather be at college than anything else	8	8	8	8	8
I can relate course material to my career goals	8	8	8	8	8
My family encourage me to stay at this IT	8	8	8	8	8
My friends encourage me to stay at this IT	8	8	8	8	8
I felt "lost" when I first came to college	8	8	8	8	8
I feel lonely and without friends	8	8	8	8	8

Course organisation

33.	Do you think the number of your scheduled class hours is:					
	Too much	Iust right	8	Too little		
34.	Are you satisfied with	how your timetable is orga	nise	ed?		
	Wery satisfied	Reasonably satisfied	8	Not at all satisfied		
35.	Are you informed of a	ll timetable changes?				
		No No	8	N/A (Not applicable)		
36.	When changes are mad	de to classroom location, ar	e ye	ou given adequate information		
	(e.g., a map) on how to	get to your new classroom	?			
	Yes Yes	No No	8	N/A (Not applicable)		

Sources of financial aid

37. Do you have a paid job?⑧ Yes⑧ No							
IF NO, go to question 42.							
38. Does your job interfere with yo ⑧ No⑧ Yes, a li	our studies? ttle	9 Yes	, a lot				
39. Is your job related to your field	l of study?						
 40. Do you work during timetabled ⑧ Frequently ⑧ Occasio 	l hours? nally @	D Nev	er				
41. Approximately how many hou	rs per week do you	u worl	κ?				
On-campus	Off-campus						
42. How do you meet your college	expenses? (For ea Major support	ch opt Mi	ion plea nor sup	se tick port	t one box No supj	x) port	N/A
Personal savings/income			8		8		8
Parental or other family assistant	e ®		8		8		8
Loan			8		8		8
Scholarship			8		8		8
Grant			8		8		(8) (0)
Employer pays fees			(8)		(8)		8
43. To what extent would you agre	e with the following	ng stat	tements	?			
Scale: 1= strongly disagree; 2= disag	ree; 3= neutral; 4=	agree;	5 = stro	ngly a	gree	_	_
		1	2	3	4	5	N
College costs more than I expect	ed	® ©	8	(8) (0)	8	(8) (0)	
Accommodation costs more than	I expected	®	© ®	®	© ®	0 0	
I do not hudget my money as we	ll as Leould	®	®	®	®	®	
I do not budget my money as we			•	•	•	•	
Satisfaction with aspects of college							
44. When you first came to college	were you given a	good i	introdu	ction	to		
		Yes	No	N/A	ł		
Students on your course		®	8	8			
Course staff		®	8	8			
Library services		®	8	8			

N/A

Computer labs......® Student clubs......® College counsellor ® Student union.......® College chaplain...... ®

45. Please rate the extent to which you are satisfied with the following aspects of college.

Scale: 1= very dissatisfied; 2= dissatisfied; 3= neutral; 4= satisfied; 5= very satisfied

	1	•	2		-	
LECTURES	I	2	3	4	5	
Number of lectures on your course	8	8	8	(8)	8	
Size of group in lectures	(8)	8	8	(8)	8	
Quality of the lecture room	8	8	8	8	8	
TUTORIALS	1	2	3	4	5	N/A
Number of tutorials	8	8	8	8	8	8
Usefulness of tutorials	8	8	8	8	8	8
Quality of classroom	8	8	8	8	8	8
COMPUTER FACILITIES	1	2	3	4	5	N/A
Access to computer labs	8	8	8	8	8	8
Number of computers available	(8)	(8)	8	(8)	8	(8)
Modernity of computer equipment/software	8	8	8	8	8	®
Quality of the computer room	8	8	8	8	8	8
	1	2	2	4	-	
		2 ©)	4)	N/A
Number of lab sessions	0	0	© ©	0	©	©
Usefulness of lab sessions	8	8	8	8	8	8
Quality of the labs	(8)	(8)	(8)	(8)	(8)	(8)
LIBRARY FACILITIES	1	2	3	4	5	
The adequacy of library resources and services	8	8	8	8	8	
The number of study areas in the library	8	8	8	8	8	
The quality of the library building	8	8	8	8	8	
CANTEEN FACILITIES	1	2	3	4	5	N/A
The quality and choice of food	8	8	8	- 8	8	8
The cost of food	8	8	8	8	8	8
STUDENT FACILITIES	1	2	3	4	5	N/A
STUDENT FACILITIES	I ®	2 ®	S ®	4 ®	3 ®	IN/A ®
Sports facilities	© ©	0	0	© ©	0	© ©
College societies	© ©	© ©	© ©	© ©	© ©	©
Creche facilities	0	© ©	© ©	© ©	© ©	©
Photocopying services	8	8	8	8	8	8
Health services	8	8	8	8	8	(8)
Banking facilities	(8)	(8)	(8)	(8)	(8)	(8)
Student bar	8	8	8	8	8	8
On-campus college accommodation	8	8	8	8	8	8
TEACHING STAFF	1	2	3	4	5	
Availability of teaching staff	8	8	8	8	8	
The enthusiasm of teaching staff	8	8	8	8	8	
Approachability of teaching staff	8	8	8	8	8	
Reliability of teaching staff	8	8	8	8	8	
Overall quality of instruction	8	8	8	8	8	

46. What changes (if	any) would you like to see carried out to improve
TEACHING STAFF	
LECTURES	
TUTORIALS	
COMPUTER FACILITIES	
LAB FACILITIES	
LIBRARY FACILITIES	
CANTEEN FACILITIES	
STUDENT FACILITIES	
ACCOMMODA- TION SERVICES	

Appendix B

Preparedness for college

How well prepared do you think your students typically are for college life in ...?

Do you think they have a good understanding of what it is like to be a student?

Do you think they have a good understanding of what their course actually involves?

Do you think that they are academically able for their course (in terms of overall capability or in terms of having a background in specific core subjects)?

Do you have any suggestions on how students might become better prepared for college?

Do you think the college provides an adequate induction for first year students?

Course Factors

Looking at the National Certificate in in particular, are there aspects to this course that you believe are problematic for some students?

Are students generally happy with how their timetable is organized?

Are there sufficient lectures, labs or tutorials?

What about staff – student contact?

Are there any changes at course or department level that you could suggest that might reduce the numbers of students dropping out?

College Factors

Do you think your college has adequate services or facilities for students? (does the lack of a given facility have any impact on dropout rates?)

Library

Student services and facilities (e.g. counselling/medical)

Canteen

Computer Facilities

Teaching Facilities

Accommodation

Does the college offer on-campus student accommodation? What percentage of students can avail of this?

Do students have difficulty sourcing affordable accommodation? (If yes, do you think that this may be a factor in some students leaving?)

Is the college easily accessible for students, either on a daily basis, or when, for example, returning after a weekend?

Finances

Are financial considerations involved in some students' decision to leave college?

What about the extent of paid employment among your students? Do you think working affects student academic performance or the likelihood of dropout?

General

Changes that could be made by the college as a whole to reduce student dropout?

Do you have any other general comments or suggestions to make about student dropout?

Appendix C

	SS	Total					16	46	15		18			18	113
	lectronic	Female					2	5	2		0			0	6
	Щ	Male					14	41	13		18			18	104
	g	Total			31		53	55		47				14	200
	Computin	Female			6		15	22		19				5	70
		Male			22		38	33		27				6	129
	studies	Total					14	36		49			22	10	131
	uction S	Female					0	4		9			0	0	10
	Constr	Male					14	32		43			22	10	121
	ation	Total		62		56					48		62		245
and IT.	e Inform Systems	Female		55		52					42		76		225
course	Offic	Male		7		4					9		2		19
nts, by	Idies	Total	148			118			48			179			493
epuodse	ness Stu	Female	89			65			31			96			281
male ro	Busi	Male	57			53			16			83			209
and fe		Total	25	28	85							31			169
of male	Science	Female	19	25	42							15			101
umber		Male	9	ю	43							14			99
Table C1. N			Athlone	Carlow	Cork	Dundalk	GMIT-C	GMIT-G	Letterkenny	Limerick	Sligo	Tallaght	Tralee	Waterford	Total

able C2. Mei	an rating ⁶ ,	by IT, ind	icating the	importanc	e of variou	us factors i	n students	' decision	to enrol in	their selec	ted IT.	
	Loci	ation	Best C	ourse	Acad Reput	emic tation	Only c offering	ollege ; course	Friends 6	enrolling	Parental	wishes
	Z	Mean	Ν	Mean	Ν	Mean	Ν	Mean	Ν	Mean	Ν	Mean
Athlone	172	3.85	168	3.67	173	3.27	168	1.74	172	2.27	172	2.41
Carlow	06	4.00	88	3.66	87	3.13	88	2.22	87	2.33	85	2.35
Cork	115	3.56	111	4.12	115	3.38	110	2.55	115	2.31	113	2.09
Dundalk	174	4.04	172	3.36	171	3.10	170	2.16	170	2.39	172	2.30
GMIT-C	81	4.00	80	3.53	81	2.77	80	2.23	80	2.03	62	2.22
GMIT-G	134	4.09	130	3.82	132	3.16	134	2.09	131	2.15	132	2.08
cetterkenny	62	3.84	63	3.21	62	3.03	59	1.81	62	2.81	61	2.15
imerick	95	3.59	92	3.57	95	3.16	94	2.16	95	2.26	92	1.99
Sligo	65	4.18	63	3.90	63	3.43	63	1.87	64	2.47	64	2.38
Fallaght	209	3.79	201	3.51	205	3.42	204	2.28	204	2.12	204	2.08
Tralee	66	3.91	66	3.84	98	3.37	95	1.84	100	2.65	96	2.30
Waterford	42	3.43	42	3.74	42	3.40	42	1.88	41	2.32	42	2.07
[otal	1338	3.87	1307	3.64	1324	3.23	1307	2.10	1321	2.31	1312	2.20

⁶ Student ratings were converted to a scaled score. Thus, "unimportant" was assigned a score of 1, "not very important" a score of 2, and so on. Scores ranged between 1 and 5, with higher scores indicating greater importance assigned to a factor.

Table C3. Mean rating	⁷ , by court	se type, in	ndicating t	he import	ance of va	arious fact	tors in stu	idents' dec	cision to e	and in the	eir selecte	d IT.
	Loca	ation	Best C	ourse	Acad Renut	emic	Only c	ollege	Frie	nds ling	Parental	wishes
	Z	Mean	Z	Mean	N	Mean	NN	Mean	N	Mean	Z	Mean
Business Studies	490	3.87	483	3.44	488	3.27	481	1.97	486	2.35	486	2.27
Computing	195	3.77	193	3.77	197	3.21	197	2.45	197	2.23	191	2.03
Construction Studies	130	3.72	129	3.60	128	2.92	127	1.94	125	2.28	129	2.10
Electronics	113	3.96	106	3.52	110	3.10	109	1.86	110	2.30	109	2.19
OIS	242	4.08	238	3.79	236	3.28	234	2.16	237	2.53	233	2.34
Science	168	3.76	158	4.03	165	3.40	159	2.25	166	1.99	164	2.10

⁷ Student ratings were converted to a scaled score. Thus, "unimportant" was assigned a score of 1, "not very important" a score of 2, and so on. Scores ranged between 1 and 5, with higher scores indicating greater importance assigned to a factor.

•	Intere	ested in	Tea	icher	Pa	rents	Fr	iends
	the s	ubject	sugge	ested it	persua	aded me	sugg	ested it
	Ν	Mean	Ν	Mean	Ν	Mean	N	Mean
Business Studies	491	4.42	485	2.54	485	1.67	485	1.81
Computing	199	4.35	196	2.08	195	1.63	193	1.56
Construction Studies	131	4.60	128	2.22	128	1.58	128	1.73
Electronics	112	4.25	109	2.24	109	1.61	109	1.56
OIS	244	4.34	238	2.47	233	1.69	235	1.67
Science	169	4.70	167	2.26	166	1.75	166	1.70

Table C4. Mean rating, by course, indicating the importance of various factors in respondents' decision to choose their selected course.

Table C5. Mean rating, by course, indicating the importance of various sources of information about the college and/or course before applying.

	Coll	ege	Caree	ers open	Inte	ernet	New	spaper
	prosp	ectus	(lay				
	N	Mean	Ν	Mean	Ν	Mean	Ν	Mean
Business Studies	488	3.68	488	2.77	488	1.98	484	1.85
Computing	196	3.86	196	2.46	194	2.29	192	1.84
Construction Studies	128	3.56	128	2.38	127	1.81	127	1.83
Electronics	110	3.55	109	2.70	109	2.03	108	1.86
OIS	241	4.14	240	3.16	231	1.94	232	2.03
Science	166	4.05	166	3.22	164	2.00	163	1.88

Table C6. Mean rating, by IT, indicating the importance of various sources of information about the college and/or course before applying.

	Col	lege	Caree	rs open	Inte	ernet	News	paper
	prosp	ectus	d	ay				
	N	Mean	N	Mean	N	Mean	N	Mean
Athlone	172	3.53	171	2.81	171	1.89	170	1.89
Carlow	90	4.26	89	3.46	87	2.02	87	1.95
Cork	115	4.00	114	3.08	115	1.93	112	1.92
Dundalk	172	3.54	173	2.82	172	1.99	171	1.84
GMIT-C	81	3.57	80	2.63	80	2.05	78	1.76
GMIT-G	132	3.73	131	2.15	130	2.18	128	1.78
Letterkenny	61	3.80	62	3.16	62	2.13	60	1.88
Limerick	94	3.73	95	2.61	93	2.18	94	1.91
Sligo	64	4.36	63	2.67	63	1.75	63	1.86
Tallaght	207	3.90	207	2.68	204	2.04	206	1.84
Tralee	99	3.96	100	3.29	94	1.96	95	2.19
Waterford	42	3.90	42	2.64	42	1.98	42	1.76
Total	1329	3.81	1327	2.81	1313	2.01	1306	1.88

		1^{st}	2^{nd}	3 rd	4^{th}	5 th or
						lower
Business	Athlone (N=148)	64.2	21.6	5.4	4.7	4.1
Studies	Dundalk (N=118)	59.3	14.4	11.9	3.4	11.0
	Letterkenny (N=48)	79.2	14.6	4.2	0.0	2.1
	Tallaght (N=178)	52.8	23.0	8.4	5.1	10.7
	Total (N=492)	60.4	19.7	7.9	4.1	7.9
Computing	Cork (N=31)	83.9	12.9	0.0	3.2	0.0
	GMIT-G (N=55)	92.7	5.5	1.8	0.0	0.0
	Limerick (N=46)	52.2	19.6	19.6	2.2	6.5
	Waterford (N=14)	57.1	14.3	28.6	0.0	0.0
	GMIT-C (N=53)	56.6	22.6	15.1	1.9	3.8
	Total (N=199)	69.8	15.1	11.1	1.5	2.5
Construction	GMIT-G (N=35)	68.6	22.9	8.6	0.0	0.0
Studies	Limerick (N=49)	53.1	22.4	18.4	2.0	4.1
	Tralee (N=22)	54.5	27.3	4.5	9.1	4.5
	Waterford (N=10)	100.0	0.0	0.0	0.0	0.0
	GMIT-C (N=14)	57.1	21.4	14.3	7.1	0.0
	Total (N=130)	61.5	21.5	11.5	3.1	2.3
Electronics	GMIT-G (N=46)	69.6	15.2	10.9	4.3	0.0
	Letterkenny (N=15)	66.7	6.7	6.7	6.7	13.3
	Sligo (N=17)	82.4	11.8	5.9	0.0	0.0
	Waterford (N=18)	88.9	0.0	5.6	0.0	5.6
	GMIT-C (N=16)	75.0	6.3	18.8	0.0	0.0
	Total (N=112)	75.0	9.8	9.8	2.7	2.7
Office	Carlow (N=62)	69.4	21.0	6.5	1.6	1.6
Information Systems	Dundalk (N=56)	69.6	16.1	7.1	5.4	1.8
Systems	Sligo (N=48)	77.1	12.5	6.3	2.1	2.1
	Tralee (N=79)	75.9	16.5	5.1	1.3	1.3
	Total (N=245)	73.1	16.7	6.1	2.4	1.6
Science	Athlone (N=25)	72.0	12.0	8.0	0.0	8.0
	Carlow (N=28)	64.3	21.4	10.7	0.0	2.6
	Cork (N=85)	71.8	18.8	7.1	1.2	1.2
	Tallaght (N=30)	53.3	26.7	13.3	0.0	6.7
	Total (N=168)	67.3	19.6	8.9	0.6	3.6

Table C7. Percentage of respondents, by course & IT, indicating whether the course on which they were enrolled was their first, second, third, fourth or fifth or lower CAO choice.

		Worse than expected	About what expected	Better than expected
Business	Athlone (N=148)	9.5	68.2	22.3
Studies	Dundalk (N=118)	10.2	61.9	28.0
	Letterkenny (N=48)	20.8	45.8	33.3
	Tallaght (N=179)	9.5	60.3	30.2
	Total (N=493)	10.8	61.7	27.6
Computing	Cork (N=30)	13.3	70.0	16.7
	GMIT-C (N=53)	13.2	62.3	24.5
	GMIT-G (N=55)	7.3	67.3	25.5
	Limerick (N=47)	14.9	68.1	17.0
	Waterford (N=14)	14.3	57.1	28.6
	Total (N=199)	12.1	65.8	22.1
Construction	GMIT-C (N=14)	28.6	50.0	21.4
Studies	GMIT-G (N=36)	13.9	61.1	25.0
	Limerick (N=49)	22.4	53.1	24.5
	Tralee (N=22)	9.1	59.1	31.8
	Waterford (N=10)	0.0	70.0	30.0
	Total (N=131)	16.8	57.3	26.0
Electronics	GMIT-C (N=16)	12.5	62.5	25.0
	GMIT-G (N=46)	8.7	60.9	30.4
	Letterkenny (N=15)	13.3	73.3	13.3
	Sligo (N=18)	16.7	72.2	11.1
	Waterford (N=18)	5.6	77.8	16.7
	Total (N=113)	10.6	67.3	22.1
Office	Carlow (N=61)	18.0	73.8	8.2
Information Systems	Dundalk (N=56)	12.5	67.9	19.6
Systems	Sligo (N=47)	4.3	55.3	40.4
	Tralee (N=79)	7.6	64.6	27.8
	Total (N=243)	10.7	65.8	23.5
Science	Athlone (N=25)	8.0	52.0	40.0
	Carlow (N=28)	14.3	57.1	28.6
	Cork (N=85)	21.2	64.7	14.1
	Tallaght (N=31)	6.5	45.2	48.4
	Total (N=169)	15.4	58.0	26.6

Table C8. Percentage of respondents, by course & IT, describing how their college experience compared to their expectations.

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		More	As expected	Less
Business	Athlone (N=148)	20.3	68.9	10.8
Studies	Dundalk (N=118)	19.5	56.8	23.7
	Letterkenny (N=48)	29.2	56.3	14.6
	Tallaght (N=179)	21.2	59.8	19.0
	Total (N=493)	21.3	61.5	17.2
Computing	Cork (N=30)	36.7	40.0	23.3
	GMIT-C (N=53)	22.6	56.6	20.8
	GMIT-G (N=55)	47.3	49.1	3.6
	Limerick (N=47)	53.2	42.6	4.3
	Waterford (N=14)	64.3	14.3	21.4
	Total (N=199)	41.7	45.7	12.6
Construction	GMIT-C (N=14)	71.4	28.6	0.0
Studies	GMIT-G (N=36)	47.2	47.2	5.6
	Limerick (N=49)	18.4	63.3	18.4
	Tralee (N=22)	27.3	63.6	9.1
	Waterford (N=10)	10.0	90.0	0.0
	Total (N=131)	32.8	57.3	9.9
Electronics	GMIT-C (N=16)	50.0	50.0	0.0
	GMIT-G (N=46)	52.2	43.5	4.3
	Letterkenny (N=15)	66.7	33.3	0.0
	Sligo (N=18)	61.1	33.3	5.6
	Waterford (N=18)	55.6	38.9	5.6
	Total (N=113)	55.8	40.7	3.5
Office	Carlow (N=61)	42.6	45.9	11.5
Information Systems	Dundalk (N=56)	19.6	73.2	7.1
Systems	Sligo (N=48)	10.4	72.9	16.7
	Tralee (N=79)	36.7	57.0	6.3
	Total (N=244)	29.1	61.1	9.8
Science	Athlone (N=25)	32.0	60.0	8.0
	Carlow (N=28)	32.0	50.0	17.9
	Cork (N=85)	55.3	35.3	9.4
	Tallaght (N=31)	22.6	67.7	9.7
	Total (N=169)	42.0	47.3	10.7

Table C9. Percentage of students, by course & IT, describing how their course workload compared to their expectations.

missing classes.	ork Other	15.0	.6 13.1	8 14.1	0.0 17.3	.9 13.2		0.0 14.8	3 20.0	0.0 29.7	4 15.6	.4 21.7	0.0 12.5	16.5
s for 1	M	3	1	3	9	1	7	0	4	0	5	1	0	ŝ
arious reason	Socialising night before	<i>2</i> .7	3.3	5.1	0.6	7.5	6.2	8.3	5.7	10.8	9.9	1.4	0.0	6.4
& offering va	No interest	4.5	9.8	16.7	3.8	7.5	4.9	16.7	7.1	16.2	6.6	2.9	0.0	7.4
previous week	Sport commitment	3.8	3.3	1.3	5.3	11.3	1.2	4.2	0.0	0.0	2.4	2.9	6.3	3.3
classes in the p	Transport. difficulties	0.9	8.2	20.5	12.8	17.0	6.2	4.2	10.0	5.4	22.8	8.7	0.0	12.2
attending all c	Timetable difficulties	2.3	4.9	1.3	2.3	0.0	0.0	4.2	5.7	5.4	9.9	<i>T.</i> 2	0.0	4.0
ts, by IT, not :	Overslept/ lazy/tired	28.6	21.3	25.6	17.3	32.1	28.4	22.9	30.0	35.1	21.0	23.2	43.8	25.1
of responden	Illness/ medical app	36.8	39.3	19.2	32.3	15.1	27.2	16.7	15.7	13.5	19.2	33.3	25.0	25.8
Percentage	% not attending	77.3	67.8	67.8	76.4	63.9	60.4	<i>77</i> .4	72.9	56.9	79.5	68.3	38.1	70.4
Table C10.		Athlone (N=133)	Carlow (N=61)	Cork (N=78)	Dundalk (N=133)	GMIT-C (N=53)	GMIT-G (N=81)	Letterkenny (N=48)	Limerick (N=70)	Sligo (N=37)	Tallaght (N=167)	Tralee (N=69)	Waterford (N=16)	Total (N=946)

excluding class time.							
	0-5 hours	6-10 hours	11-15 hours	16-20 hours	21-25 hours	26-30 hours	30+ hours
Business Studies (N=491)	46.6	36.7	7.5	3.9	2.4	2.2	0.6
Computing (N=199)	45.2	31.2	11.1	4.0	2.5	4.5	1.5
Construction Studies (N=128)	39.8	33.6	11.7	4.7	4.7	3.1	2.3
Electronics (N=112)	33.0	35.7	13.4	6.3	1.8	3.6	6.3
Office Information Systems (N=243)	39.9	41.2	9.9	2.9	2.9	3.3	0.0
Science (N=165)	33.3	47.9	10.9	4.2	0.0	1.8	1.8
Total (N=1338)	41.8	37.7	9.8	4.0	2.4	2.9	1.4

Table C11. Percentage of respondents, by course, indicating approximately how much time they spend on course work in a typical week,

	Glad to be attending this college		Rather be at college than anything else		Felt "lost" when first came to college		Feel lonely and without friends	
								r
	Ν	Mean	Ν	Mean	Ν	Mean	Ν	Mean
Athlone	173	3.97	173	3.58	172	3.11	172	1.94
Carlow	89	3.84	89	3.09	89	3.04	89	1.82
Cork	116	3.93	116	3.48	113	2.78	115	1.82
Dundalk	174	3.98	173	3.44	173	3.20	172	1.95
GMIT-C	83	3.78	82	3.27	80	2.98	81	1.90
GMIT-G	136	3.98	136	3.57	134	2.75	134	1.65
Letterkenny	63	3.79	62	3.39	63	2.46	61	1.75
Limerick	95	3.76	95	3.44	95	2.88	93	1.78
Sligo	64	4.23	62	3.50	63	2.87	63	1.76
Tallaght	209	4.13	207	3.63	207	2.63	208	1.54
Tralee	101	4.14	100	3.40	101	3.08	101	1.95
Waterford	42	4.14	42	3.45	40	2.95	41	1.93
Total	1345	3.98	1337	3.47	1330	2.91	1330	1.80

Table C12. Mean rating, by IT, indicating respondents' agreement with statements about their satisfaction with their college choice.

Table C13. Mean rating, by course, indicating respondents' agreement with statements about their course.

	Relate course to		Glad enrolled on		Interested in	
					course	
	career goals		this course			
	Ν	Mean	Ν	Mean	Ν	Mean
Business Studies	491	3.64	491	3.89	491	3.92
Computing	196	3.54	198	3.86	198	4.00
Construction Studies	131	3.83	130	3.89	131	4.16
Electronics	110	3.75	111	3.96	112	4.17
Office Information Systems	238	3.73	241	3.89	242	3.94
Science	165	3.66	167	4.04	167	4.28
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		Too much	Just right	Too little		
Science	Athlone (N=25)	28.0	72.0	0.0		
	Carlow (N=28)	35.7	64.3	0.0		
	Cork (N=85)	54.1	43.5	2.4		
	Tallaght (N=30)	23.3	73.3	3.3		
	Total (N=168)	41.7	56.5	1.8		
Business	Athlone (N=147)	18.4	78.9	2.7		
Studies	Dundalk (N=118)	11.9	83.1	5.1		
	Letterkenny (N=47)	25.5	68.1	6.4		
	Tallaght (N=179)	28.5	67.0	4.5		
	Total (N=491)	21.2	74.5	4.3		
Office	Carlow (N=60)	28.3	66.7	5.0		
Information	Dundalk (N=56)	12.5	87.5	0.0		
Systems	Sligo (N=47)	31.9	68.1	0.0		
	Tralee (N=79)	67.1	32.9	0.0		
	Total (N=242)	38.0	60.7	1.2		
Construction Studies	GMIT-G (N=36)	36.1	63.9	0.0		
	Limerick (N=49)	4.1	53.1	42.9		
	Tralee (N=22)	68.2	31.8	0.0		
	Waterford (N=9)	11.1	88.9	0.0		
	GMIT-C (N=14)	78.6	21.4	0.0		
	Total (N=130)	32.3	51.5	16.2		
Computing	Cork (N=31)	41.9	54.8	3.2		
	GMIT-G (N=55)	23.6	74.5	1.8		
	Limerick (N=45)	60.0	35.6	4.4		
	Waterford (N=14)	50.0	50.0	0.0		
	GMIT-C (N=52)	26.9	71.2	1.9		
	Total (N=197)	37.6	59.9	2.5		
Electronics	GMIT-G (N=46)	78.3	21.7	0.0		
	Letterkenny (N=15)	46.7	46.7	6.7		
	Sligo (N=18)	77.8	22.2	0.0		
	Waterford (N=18)	16.7	83.3	0.0		
	GMIT-C (N=16)	56.3	43.8	0.0		
	Total (N=113)	61.1	38.1	0.9		

Table C14. Percentage of respondents, by course & IT, indicating whether they thought that the number of scheduled class hours was too much, just right, or too little.

		Very satisfied	Reasonably satisfied	Not at all satisfied
Science	Athlone (N=25)	16.0	76.0	8.0
	Carlow (N=28)	3.6	78.6	17.9
	Cork (N=85)	10.6	69.4	20.0
	Tallaght (N=31)	12.9	58.1	29.0
	Total (N=169)	10.7	69.8	19.5
Business	Athlone (N=148)	7.4	77.7	14.9
Studies	Dundalk (N=118)	5.1	67.8	27.1
	Letterkenny (N=47)	14.9	63.8	21.3
	Tallaght (N=178)	1.1	39.3	59.6
	Total (N=491)	5.3	60.1	34.6
Office	Carlow (N=62)	4.8	66.1	29.0
Information	Dundalk (N=56)	7.1	83.9	8.9
Systems	Sligo (N=47)	4.3	83.0	12.8
	Tralee (N=79)	2.5	58.2	39.2
	Total (N=244)	4.5	70.9	24.6
Construction Studies	GMIT-G (N=36)	13.9	66.7	19.4
	Limerick (N=49)	2.0	42.9	55.1
	Tralee (N=22)	13.6	68.2	18.2
	Waterford (N=9)	11.1	88.9	0.0
	GMIT-C (N=14)	7.1	71.4	21.4
	Total (N=130)	8.5	60.0	31.5
Computing	Cork (N=31)	16.1	71.0	12.9
	GMIT-G (N=55)	0.0	78.2	21.8
	Limerick (N=47)	10.6	72.3	17.0
	Waterford (N=14)	7.1	64.3	28.6
	GMIT-C (N=53)	3.8	71.7	24.5
	Total (N=200)	6.5	73.0	20.5
Electronics	GMIT-G (N=46)	2.2	82.6	15.2
	Letterkenny (N=15)	13.3	40.0	46.7
	Sligo (N=18)	0.0	83.3	16.7
	Waterford (N=18)	11.1	61.1	27.8
	GMIT-C (N=16)	6.3	37.5	56.3
	Total (N=113)	5.3	67.3	27.4

Table C15. Percentage of respondents, by course & IT, indicating how satisfied they were with their course timetable.

		Yes	No	N/A
Science	Athlone (N=25)	92.0	4.0	4.0
	Carlow (N=28)	46.4	50.0	3.6
	Cork (N=84)	75.0	10.7	14.3
	Tallaght (N=31)	67.7	29.0	3.2
	Total (N=168)	71.4	19.6	8.9
Business	Athlone (N=148)	83.1	10.8	6.1
Studies	Dundalk (N=117)	68.4	29.1	2.6
	Letterkenny (N=47)	72.3	19.1	8.5
	Tallaght (N=179)	40.8	56.4	2.8
	Total (N=491)	63.1	32.6	4.3
Office	Carlow (N=61)	59.0	41.0	0.0
Information	Dundalk (N=56)	80.4	14.3	5.4
Systems	Sligo (N=47)	80.9	6.4	12.8
	Tralee (N=79)	73.4	22.8	3.8
	Total (N=243)	72.8	22.2	4.9
Construction Studies	GMIT-G (N=35)	68.6	5.7	25.7
	Limerick (N=49)	32.7	65.3	2.0
	Tralee (N=22)	59.1	27.3	13.6
	Waterford (N=9)	88.9	11.1	0.0
	GMIT-C (N=14)	78.6	7.1	14.3
	Total (N=129)	55.8	32.6	11.6
Computing	Cork (N=31)	83.9	9.7	6.5
1 0	GMIT-G (N=54)	75.9	24.1	0.0
	Limerick (N=46)	80.4	6.5	13.0
	Waterford (N=14)	78.6	21.4	0.0
	GMIT-C (N=53)	88.7	7.5	3.8
	Total (N=198)	81.8	13.1	5.1
Electronics	GMIT-G (N=46)	82.6	17.4	0.0
	Letterkenny (N=14)	64.3	35.7	0.0
	Sligo (N=17)	94.4	5.6	0.0
	Waterford (N=18)	38.9	55.6	5.6
	GMIT-C (N=16)	40.0	53.3	6.7
	Total (N=112)	69.4	28.8	1.8

Table C16. Percentage of respondents, by course & IT, indicating whether they were informed of all timetable changes.

0		0		•
		Yes	No	N/A
Science	Athlone (N=25)	48.0	40.0	12.0
	Carlow (N=28)	28.6	67.9	3.6
	Cork (N=85)	38.8	35.3	25.9
	Tallaght (N=31)	25.8	61.3	12.9
	Total (N=169)	36.1	46.2	17.8
Business Studies	Athlone (N=148)	39.9	52.0	8.1
	Dundalk (N=116)	31.0	61.2	7.8
	Letterkenny (N=47)	38.3	34.0	27.7
	Tallaght (N=178)	11.2	84.3	4.5
	Total (N=489)	27.2	64.2	8.6
Office	Carlow (N=62)	29.0	67.7	3.2
Information	Dundalk (N=56)	42.9	46.4	10.7
Systems	Sligo (N=47)	44.7	34.0	21.3
	Tralee (N=79)	41.8	54.4	3.8
	Total (N=244)	39.3	52.0	8.6
Construction	GMIT-G (N=35)	51.4	40.0	8.6
Studies	Limerick (N=49)	22.4	71.4	6.1
	Tralee (N=22)	40.9	27.3	31.8
	Waterford (N=9)	33.3	66.7	0.0
	GMIT-C (N=14)	35.7	57.1	7.1
	Total (N=129)	35.7	53.5	10.9
Computing	Cork (N=31)	58.1	35.5	6.5
	GMIT-G (N=54)	24.1	61.1	14.8
	Limerick (N=46)	41.3	32.6	26.1
	Waterford (N=14)	35.7	64.3	0.0
	GMIT-C (N=53)	62.3	30.2	7.5
	Total (N=198)	44.4	42.4	13.1
Electronics	GMIT-G (N=46)	26.1	60.9	13.0
	Letterkenny (N=15)	46.7	40.0	13.3
	Sligo (N=18)	83.3	16.7	0.0
	Waterford (N=18)	11.1	83.3	5.6
	GMIT-C (N=16)	43.8	43.8	12.5
	Total (N=113)	38.1	52.2	9.7

Table C17. Percentage of respondents, by course & IT, indicating whether they were given adequate information on how to get to their new classroom.