

Student Support and Retention:  
Models of Explanation and Good Practice  
University of Manchester and UMIST

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April 2003

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## Executive Summary

The report aims to review the existing research on student support and retention in higher education. It is designed to provide an overview of the current state of student support in departments and schools at UMIST and the University of Manchester, and to state the case for a progression towards a more integrated framework for student support. An overview of the major models of withdrawal, taking into account both academic and social factors is given in Section 2. It is important to note that there is consensus across the existing literature that attitude towards student withdrawal is on the whole overly negative with too much emphasis being placed on achieving retention rates as close to 100% as possible. There is a growing need for a shift towards maximising optimum retention and recognising that for some students the choice to leave university is a positive one that should be supported by their departments and by the University as a whole. For those who have achieved their goals at University or who have made the mature and independent decision to seek a different path we have a responsibility to support their choice through careers advice and also be keeping the door open for their possible return. Perhaps there is a need to emphasise to our students the importance and the flexibility of life-long learning.

A review of existing good practice at UMIST, the University of Manchester and other HEI's across the sector is given in Sections 3 and 4. In looking at support areas I have described those that fall into one of three main categories, social integration, academic integration and monitoring progression. There is a considerable amount of work being done in these areas at both institutions as well as innovative practices being introduced elsewhere.

We are at the mercy of the wider education system and it is becoming increasingly clear that students are not prepared as well as perhaps they used to be for the challenges of university life. Through the development of strong links with schools, colleges and FE providers we can hopefully start to bridge that gap and provide clear, consistent and practical support to student at risk of withdrawal. Outreach work is only the start. For many students the need for increased availability of support continues until the end of their first year and beyond. For these students accessibility of support services is the key. We must ensure that the services on offer are seen in a positive light and are aimed at enhancing the student experience to aid the transition to independent learning.

## 1: Project Overview

The Student Retention Project is designed to research good practice in student support leading to retention gains. Information has been drawn from existing practice at UMIST, University of Manchester and other HEI's across the sector. Following on from the initial research there will be a programme of dissemination and the development of projects led by departments in line with their own needs and good practice guidelines.

The report will look at existing research on this topic and current research at institutional, national and international levels. We will also look at the identification of target groups, institutional and sector wide good practice and areas for improvement as identified by staff and students.

## 2: Literature Review

### **2.1: Tinto**

Drawing on Tinto's longitudinal model (Figure 1) we can extrapolate that withdrawals occur when students do not integrate into the social and academic spheres of university life. Fundamental to the integration of the student are their pre-entry attributes from which they derive their values, academic intentions and commitment to the educational process. These pre-entry attributes include the level and type of pre-university education, family experience of education and their own abilities. To this I would add expectations of university and level of background support structures. Parental or familial support for higher education choices is key to the well being of the student whilst s/he is adapting to the rigours and challenges of university life. Students whose families have a heritage of higher education experience are more likely to remain at university than those who are first generation entrants. It is likely that students who come from a family background with experience of higher education have a ready-made support structure as they themselves experience the transition to university life.

For those students without a knowledgeable and supportive background the transition can be much more difficult as they can easily start to feel isolated and lose motivation if they are not made aware of their academic progression. The problems that first generation entrants face are accepted by the government and by the higher education sector as demonstrated by the continued commitment to supporting and retaining these students under the Widening Participation guidelines.

Students from the Widening Participation target groups are often disadvantaged when making informed choices about university courses and institutions. There is also a stronger chance that these students will enter university through a non-traditional route such as Access courses or Clearing as well as entering with qualifications other than A Levels or Highers that admissions staff may find more difficult to assess. If students are unable to make an informed and reasoned decision then they are likely to be less committed to their chosen course and institution. Therefore despite their individual academic abilities they are more likely to withdraw from university

should other aspects of their lives cause them problems. There is also a concern that students from backgrounds with little or no experience of higher education may find the pressures of adapting to university more challenging than those students who have seen friends and family go through the same experiences. This question of adaptability leads us on to the subject of expectations of university. Students from low participation neighbourhoods or from families with no higher education heritage may find that their expectations of university are vastly different from reality. Whilst this is often the case for students from traditional entry groups, who can have a somewhat idealised view of the life of a student, the situation is exacerbated if the student has not resource in their immediate circle to discuss the differences they are seeing. Partly the establishment of realistic expectations is determined by the recruitment literature that students are sent during the application and acceptance process, and also the course information sent directly before entrance to university. This disparity between expectation and reality can also extend to the social sphere of engagement with university life. Many students are ill equipped for the difficulties of living away from home, paying bills and sharing accommodation.

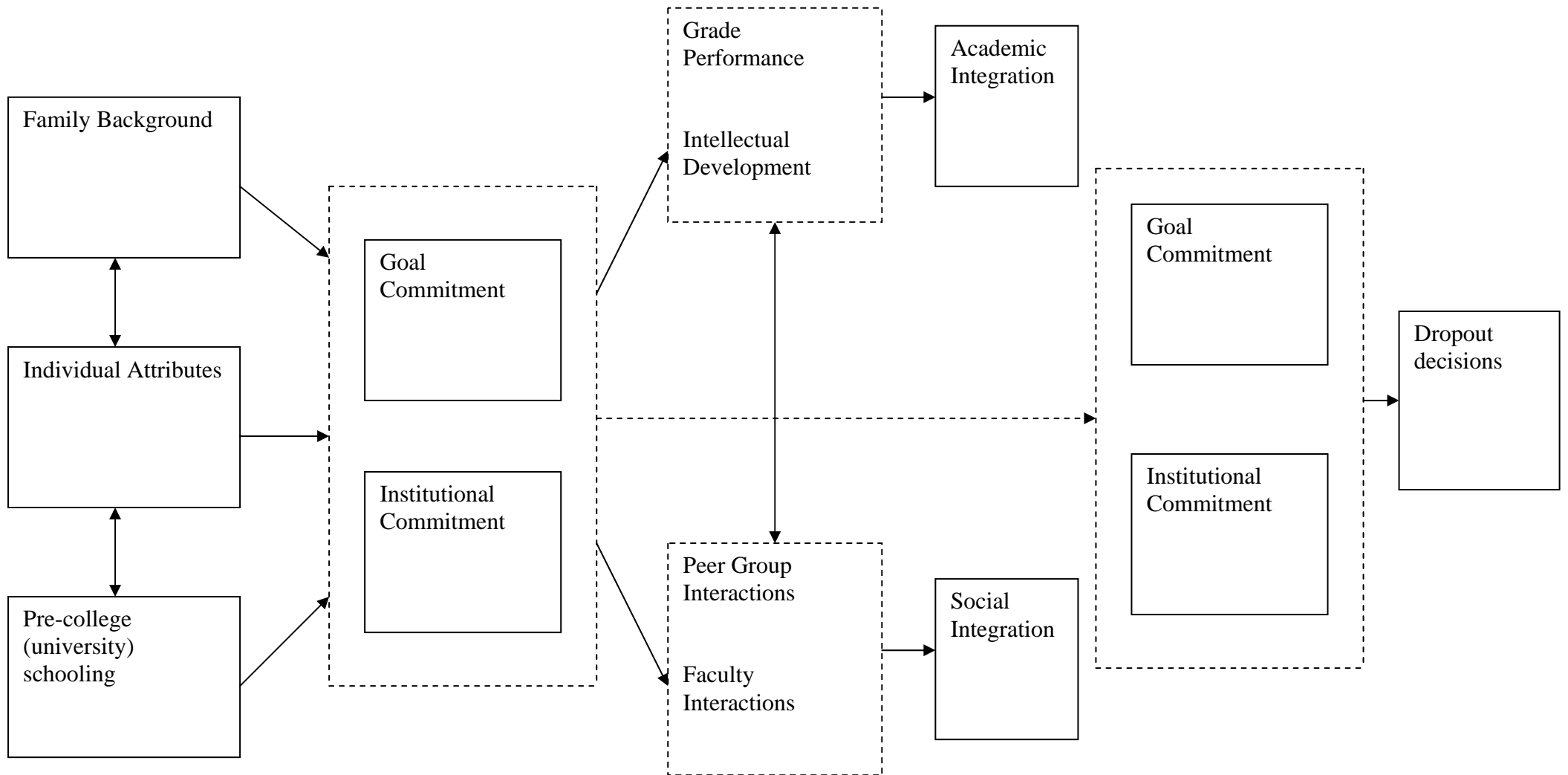
Based on Tinto's dominant longitudinal model it appears that there are two main points at which it is appropriate for institutions to take action. The first is at the point of developing goal (end result of attendance at University) and institutional commitment and the second is at the point where commitment is being strengthened by integration into the social and academic spheres of university life. Developing commitment initially is the role of outreach work and schools liaison initiatives under the guidance of the recruitment and admission teams and specific initiatives designed to develop this area will be discussed later in this report. Strengthening commitment involves a greater effort from individual departments, fellow students and central services.

Students perceive their integration based on their social and academic experiences. They then re-evaluate their goals and commitment based on this perceived integration and on external factors such as employment, childcare or domestic arrangements. To summarise the position taken by Tinto and his followers:

the "decision to persist or withdraw is initially influenced by their pre-enrolment characteristics, background variables and commitment levels which are then attenuated by their integration into the social and academic spheres of the institution"

(Chapman and Pascarella, 1983)

FIG.1: A CONCEPTUAL SCHEMA FOR DROPOUT FROM COLLEGE (TINTO: 1975, P95)







## **2.2: Ozga and Sukhnanen**

Ozga and Sukhnanen looked at the same problem in a different way. They decided that there are two key variables explaining non-completion, preparedness for university and compatibility of choice. Lack of preparedness indicated inadequate sources of information, no clear orientation towards higher education or having made a reactive rather than a proactive choice. Compatibility of choice was described as the extent to which choices fulfilled expectations and also the extent to which the institutional requirements matched the student's skills and background knowledge. Again it seems likely that first generation entrants to higher education or those students entering through Clearing are more likely to be non-completers than those who have followed a more traditional progression route. For those students whose prior educational experience has been in a school or college that has a long tradition of sending students to university it is probable that there is some preparation in the academic skills likely to be needed and also in the kind of approach taken in teaching and learning. For students entering university from the workplace or from educational establishments whose main aim is to prepare people to go into the workplace the preparation offered might be inadequate or non-existent. However this situation does seem likely to change. Anecdotal evidence from various departments suggests that the vast majority of students are entering university without proper academic preparation and without the skills and background knowledge to successfully complete the course despite having all the correct qualifications. It is likely that students at lower levels in the educational system are being taught the necessary facts to pass the examinations but not the core learning and research skills that are key to success at university.

## **2.3: Mackie**

Mackie takes a more psychosocial view to the subject of student withdrawal. In her 1998 work, leading on from Salzburger-Wittenberg she describes the transition to higher education as a "psychosocial experience which involves change to the individual's sense of self and occurs at a stage in the young adult's life when role identity is important and the need for interactions with others is heightened" (Mackie, 2001). Whilst this is true for many of our young undergraduates it may also ring true for those returning to higher education after a time in employment whether as young adult returners or mature students. The transition from the safety and security of a job to the uncertainty of student life can be as large an upheaval for these groups as for those students leaving home for the first time. However the transition to higher education is apparently successful in most cases, therefore it becomes clear that some students are more susceptible to the effects of transition than others. One of the ways that Mackie describes the transition is as a lack of control over one's environment. It is the regaining of that control and sense of self that is important for the maintenance of psychological well being and progression through a higher education career. Social support plays a large part in helping the transition of students to higher education. It is emotionally sustaining, can alleviate homesickness, can facilitate the transition to a new life and, most importantly, can buffer the effects of negative experiences.

In Mackie's opinion there are four areas of integration, which is essentially an expansion on Tinto's social and academic spheres. Mackie denotes these areas as social integration, organizational integration, integration with the external environment and individual commitment to change. She describes these areas as forces, each with constraints and enablers that push the student through university or pull them back. This theory has been developed from Lewin's work on the Force Field Analysis Model (Lewin, 1951). In theory these forces will either "promote full integration into all aspects of university life i.e. staying, and inhibit leaving or promote moving away from integration into all aspects of university life i.e. leaving, and inhibit staying" (Mackie, 2001). This is demonstrated in the diagram below:

If the university experience is seen as a change from the individual's state as a non-student towards a state of being a student who is fully integrated into university life then the Force Field Analysis Model looks at the way forces inhibit or promote the desired change.

FIG.2: FORCE FIELD ANALYSIS MODEL (MACKIE: 2001, P6)



Mackie describes her four forces of integration as follows:

1. Social Integration – Meeting people and making friends, establishing a social group. Participating in university social life.
2. Organizational Integration – Understanding and coping with course content, pace and style. Finding the organization supportive in meeting their needs.
3. Integration within the external environment – Forces in the environment that aid or impede the ability of the student to cope with the change.
4. Individual commitment to change – The motivation, commitment, feelings and attitudes of the individuals involved in the change.

All these four aspects combine together to inspire movement towards the end goal of integration into university life as shown in Figure 3.

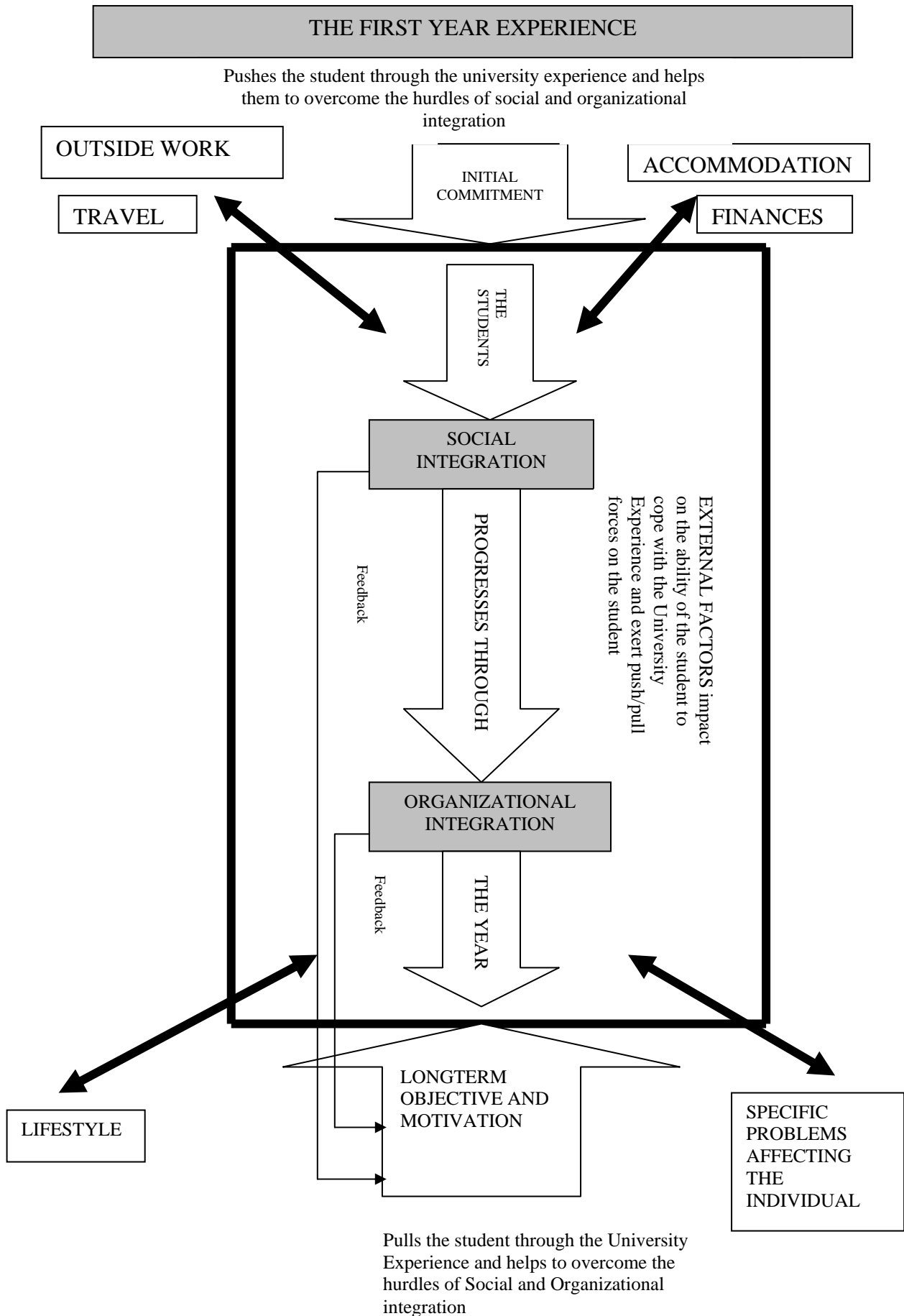


FIG. 3: A MODEL OF THE PROCESS OF STUDENT DEPARTURE (MACKIE, 1998)

In working towards retaining students at university it is necessary to tackle the factors that constrain them in their progression through the year. Following is a guideline to type of constraints that students might have in each of the four areas.

1. Constraints on Social Integration – comparing new friends to old friends unfavourably, overly attached to the past and unable to move forward, difficulty in making friends and in widening their circle of friends beyond those made in the first weeks of the year, limited participation in university social life, homesick and going home often thereby increasing social isolation, a dislike of typical student social activities
2. Constraints on Organizational Integration – may have felt that the tone of induction was impersonal, negative, frightening or not commensurate with their needs and have subsequent experiences that enforce this point of view, style of course experienced is too difficult, teaching groups are too big, there is no personal connection with the tutor, may have problems with specific aspects of the course, difficulty coping with the quantity and quality of the work expected of them, may actively dislike course, or the course may not have met their expectations, lack of feedback may mean that they are confused about their progress, organization is not perceived as sympathetic to their needs, pastoral care is perceived as ineffective, timetabling problems cannot be resolved, administrative difficulties where the university has not been seen as helpful
3. Constraints on Integration with the External Environment – Accommodation, Finance, Relationships (personal and family relationships), specific problems such as health, travel or work commitments.
4. Constraints on Individual Commitment to Change – poor initial commitment due to a late entry decision, early doubts about leaving home and the suitability of their course choice, homesickness leading to feelings of lack of control over events and feelings of helplessness, lack of confidence, feelings of alienation, de-motivated through the struggle to integrate in the preceding areas, parental influence (can be positive or negative).

Students need to feel a sense of control and ownership over the decision to come to university else doubts will rapidly arise with a perception that difficulties cannot be overcome.

According to Mackie's research at the University of the West of England in Bristol, homesickness is more common in students who leave the university than those who persist. From her research she has concluded that this may imply an inability to let go of past attachments and move forward.

The biggest difference between those who consider leaving but stay and those who actually leave seems to be in the maintenance of commitment. It is not the problems that cause a student to leave university but their perceptions of the problems based on their commitment, motivation and background

characteristics. Leavers tend to see problems as things that cannot be overcome, perhaps because the individual often does not have the personal experience or the anecdotal evidence to find a solution. Mackie found that students who left seemed to lack the sense of control over their own lives, which would perhaps have facilitated them in seeking resolution of their other problems. Mackie leaves a major concern unanswered in her work. Does the student start their higher education career already feeling powerless or does this feeling of powerlessness develop as problems mount up?

## **2.4: Fisher**

Fisher (1987) extends the psychosocial analysis of the student experience with a longitudinal study examining the effects of the transition to university on residential and home-based students. All students surveyed showed a raised level of psychological disturbance. For those students who reported feelings of homesickness the level of psychological disturbance was higher than for those without feelings of homesickness, as was the level of cognitive failure. Therefore Fisher concludes, “the gain in psychological disturbance following the transition was greater for the homesick group”. Fisher goes on to discuss the “effects of stressful transitions on psychological state and the concept of personal vulnerability.”

For students, the transition to university is not just a matter of meeting new academic and social challenges but also a fundamental break with several aspects of the previous life-style and the need to adapt to a new environment often with the added residential dimension. Fisher (1986) reports that 60-70% of students report feelings of homesickness. Those students who reported feeling home sick were also likely to show higher absentmindedness scores and difficulties in concentrating and coping with academic work.

All students showed a rise in psychological disturbance, particularly in depression and obsessionality. According to Fisher this increase in depression could be explained by the theory that transitions result in a loss of control as previous approaches and plans are rendered inappropriate by the change in circumstances. The feelings of loss of control might then escalate into feelings of depression and helplessness.

For those students who struggle to cope with the academic and social challenges that they face on arrival at university there is the potential for them to view their previous lifestyle with great longing as they may have had less responsibility and more control over their circumstances. For these students homesickness could easily develop and students may decide to withdraw from university.

This point of view is supported by a report made to Universities UK on behalf of the Heads of University Counselling Services<sup>1</sup>. The report looked at the role

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<sup>1</sup> A Report prepared on behalf of the Heads of University Counselling Services (HUCS – a special interest group of the Association of University and College Counsellors AUCC) Group for submission to the Universities UK Steering Group for Student Retention, June 2002

of counselling services in supporting students and bears out anecdotal evidence from our own Student Counselling Service in stating that the vast majority of students who seek advice from the counselling service when contemplating withdrawing from university decide not to leave after counselling has been given. The report also identifies a set of factors affecting the student experience that are dealt with by counselling services across the higher education sector:

“Factors affecting the student experience:

- Capacity to manage the late adolescent maturational tasks
- Impact of a range of change and transitional events both practical and emotional
- Attachment and identification with other students, academic staff and the University. Failure to do this effectively is likely to result in drop-out
- The impact of being in a large organisation which can exacerbate or alleviate vulnerability
- Anxiety of depression inhibiting learning” (HUCS, 2002)<sup>2</sup>

### **2.5: Smith and Beggs**

A further useful if basic study of the factors helpful in identifying at risk students is the paper presented to the Society for Research in Higher Education Annual Conference 2002 by Smith and Beggs from Glasgow Caledonian University. For this study an induction questionnaire was developed as a web based resource to identify the accumulated ‘risk factor’ of a student at the time of entry to the course. The survey was carried out using first year students on a variety of Engineering programmes. Smith and Beggs chose four main risk factors based on existing literature and their own experience. These were residential or home-based, higher education heritage, part-time employment and social integration. They determined the accumulated risks by asking the following questions:

“Are you living away from your family home?

Are you the first person in your family to go to University?

Are you working more than 8 hours a week?

Do you know anyone in your class at the moment?” (Smith and Beggs 2002)

Although not mentioned in the paper presented at the SRHE Conference it seems likely that those students answering ‘yes’ to more than two of these questions could be logically classed as ‘at risk’ as it seems from other literature that a combination of factors is generally responsible for student attrition rather than a single finite cause. Smith and Beggs go on to discuss the student experience and the problem of passive withdrawal. They have included in this study all students who withdrew from the department in the academic session and not just those who withdrew after the funding council cut-off point, as is commonly the case.

Because of the problem of passive withdrawal and the relatively higher number of students from government target groups entering the department, a

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<sup>2</sup> See footnote 1, p13

new model for managing and supporting the first year experience was developed called Triple C which was based on the tenets of care, control and consistency. The administrative role of the First Year Tutor was adapted into that of an advocate for the needs and aspirations of first year students and was fully supported by the academic and administrative staff in the department. This model was developed entirely in-house and therefore carried a sense of ownership for the departmental staff. Six important elements were integrated to provide a sophisticated and successful initiative. The elements are:

“Preparation and Induction  
Personal Tutor Profiling  
Centralised Absence Monitoring  
Student Goal Setting  
Absence Management  
Assertive Outreach” (Smith and Beggs 2002)

Smith and Beggs also describe the process of preparation before the arrival of the new cohort. The timetables were rationalised and their accuracy was rigorously checked. Timetables were also adapted to allow student at least one full day off each week to allow for those students with work commitments. Changes were also made to reduce gaps between classes to no more than 1 hour and the number of early starts and late finishes was distributed evenly between the different teaching groups. This is seen as an example of the care part of their Triple C model. Pre-induction literature was personalised and a full induction schedule was designed to allow students the maximum time to get to know each other and to settle into the department. For the induction process the students were split into the groups that would become the main teaching groups and assigned a member of staff. In most cases this member of staff became their main academic tutor for the first year, demonstrating consistency from the first day.

For dealing with attendance monitoring and management a traffic light system was implemented. Sign-in sheets were forwarded to the first year tutor after each class and collated regularly. All students were then sent a coloured letter: green for those whose attendance was excellent and who could therefore progress happily, yellow for those who were causing mild concern and needed to be aware of their attendance, and pink for those students whose attendance was unacceptable. Included in the pink letters was an appointment with the first year tutor to identify and resolve any issues that might be contributing to the student’s absence. This type of activity falls under the control section of the Triple C model. Individual recovery plans were made for those students whose lack of attendance had caused them to fall behind and, when necessary, other university support services such as the Counselling service were asked to step in.

Based on the figures shown in this report the system employed by Glasgow Caledonian University’s Engineering department seems to have been remarkably effective. Over the course of two years its retention figure rose by 18% on the BSc programme and 17% on the BEng programme.

To conclude this review of a small portion of the available literature there are some important factors that are apparent in all of the studies reviewed here. The early identification of 'at risk' students is key to developing a programme of support and intervention suitable for that student's individual needs. These students can be identified by their educational background, commitment, attendance and personal circumstances. To make the identification process and the social and organizational integration easier for both the university and the student, a close working relationship needs to be established within the parent department. Information at all points needs to be clear, accurate and consistent to avoid disillusionment and subsequent losses in motivation and commitment. At all levels there needs to be an awareness of the available support structures and a certain sensitivity to the increasingly diverse needs of the student population. Whilst we must, to a certain extent, develop specialist services for particular groups, the development of an integrated and holistic student service is the key to improving the student experience for all students and thereby increasing the likelihood of retention and the ongoing personal and academic development for both staff and students.



### 3: An Overview of Good Practice at University of Manchester and UMIST<sup>3</sup>

To develop profiles of student support activity across both institutions several methods were followed. The first main activity was started by colleagues in the Teaching and Learning Support Centre at UMIST and consisted of questionnaires on different aspects of student support in line with the Realising all Students Potential programme currently being developed at UMIST<sup>4</sup>. These questionnaires were filled out and returned during one of two sessions led by the Dean of UMIST, Jill Earnshaw aimed at readying the institution for the forthcoming QAA visit. These questionnaires were then collated and visits made to departments with interesting programmes or with very little student support provision, particularly those departments whose retention record was shown as less than the institutional average as shown by statistics collated by the Registrar's Office. At the University of Manchester visits were made to varying departments based on anecdotal evidence from colleagues in Curriculum Innovation and the statistics collated by the Project VI Group led by Ros McDonnell. This was followed up by a questionnaire similar to the one used at UMIST<sup>5</sup> sent to departmental Quality Assurance and Enhancement Officers or to departmental administrators<sup>6</sup>. Unlike the UMIST questionnaire not all departments returned their responses, out of 35 sent out 24 were returned completed. As all the departments with concerning retention rates have replied to the information request, the remaining responses will not be chased up at this time. These responses were collated and examples of good practice from both institutions are shown in the following section under the various areas of student support under discussion. In the final part of this section there is an overview of research and implementation activity ongoing at other institutions across the sector.

#### **3.1. Supporting Students before they Apply<sup>7</sup>**

##### 3.1.1. School of Nursing

The School of Nursing (Faculty of Medicine, Dentistry, Nursing and Pharmacy) takes part in an Excellence in Cities project. This project was designed in conjunction with local educational agencies in response to feedback on the former open evenings. The local agencies invite approximately 10 individuals, generally women, to attend four 20 minute sessions. These sessions are designed to challenge stereotypes and raise aspirations. Role-plays are used to demonstrate the relevance of various

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<sup>3</sup> See also Appendix 1a: Digest of Departmental Questionnaire Responses and Appendix 2a: Information Collated from RaSP Meetings Nov/ Dec 2002

<sup>4</sup> See Appendix 1b: RaSP/ QAA Questionnaire - UMIST

<sup>5</sup> It was not deemed necessary to include questions on PDP/ PADP's when asking for information from University of Manchester departments as a detailed institutional audit has recently taken place on PADP activity. Likewise the question on support for disabled students is not greatly specific and the responses provided were not detailed as an institutional audit on provision for disabled students run by the Disability Support Unit is due to be started shortly.

<sup>6</sup> See Appendix 2b: Student Retention Activity Questionnaire – University of Manchester

<sup>7</sup> Question asked of University of Manchester departments only

academic subjects to Nursing, including the calculations of drug dosages, the scientific knowledge needed for intensive care and well-developed communication skills. Some work on ethics and cultural awareness is also done. The need for life long learning is stressed at these sessions. Parents and teachers can sit in on these sessions if they want to and the sessions have proved particularly popular with ethnic minority groups. The School of Nursing is also involved in a variety of mentoring initiatives and have well-developed links with schools, FE providers and local NHS Trusts, thereby providing a professional linking service from first interest to final employment. The School has worked with libraries in the Greater Manchester area in an effort to recruit mature students and returners to education through open days and special events. The School Recruitment Officer has looked into the educational profiling of students to develop realistic targeting towards local schools and FE providers. Work has been done with students at schools and FE colleges to challenge expectations about Nursing. The School also has a very quick turnaround of email enquiries, usually within 24-48 hours of receipt. Throughout the process of developing interest, application, acceptance and beyond, the Admission and Recruitment team are available to help and advise students offering a highly efficient, professional service to those who contact the School.

#### 3.1.2. Chemistry (University of Manchester)

The School of Chemistry has an active Schools Liaison programme, which includes schools' visits to the department to participate in practical work. The department is also involved in a Faculty-run Master classes programme. They host work experience students on request and also Nuffield Bursary students. They will provide a guest lecturer to local schools at the school's request. Much of this activity falls directly into the Raising Aspirations initiative of the Aim Higher programme.

#### 3.1.3. Physics (University of Manchester)

The School of Physics has three main strands to its pre-application support activity. The Manchester Physics Experience consists of two days of activities and a tour of the Jodrell Bank facility. The departmental Master classes comprise a full day of lectures and demonstrations on a particular topic and the final strand of activity is a series of workshops including a visit to the Physics laboratories and a question and answer session. Like the Chemistry programme these activities fall under the banner of Raising Aspirations.

#### 3.1.4. Planning and Landscape

The School of Planning and Landscape has employed a dedicated Marketing and Outreach Associate, funded jointly by Planning and Landscape and the Widening Participation Office. A complete overhaul of all publicity and marketing is underway and CD-ROM's are being produced for distribution in local target schools to enhance the presence of the Department and the discipline.

### 3.1.5 Art History and Archaeology

The School has been actively involved in developing an excellent Widening Participation programme in conjunction with the Manchester Museum. This programme looks specifically at students' expectations of University life and study.

## **3.2. Recruitment<sup>8</sup>**

### 3.2.1. Architecture

All students are interviewed and asked to bring with them a portfolio of work. Existing students act as guides and also run an informal question and answer session. Interviewing staff have found that by the time prospective students get to the interview part of the day their questions have already been answered by the existing students.

### 3.2.2. Music

The School runs six visit days for prospective students at which they are given a welcome pack containing information on student finance, activities in Manchester, a Parents' Information Guide, a Programme Handbook and a concert brochure. Lunch is provided in the Department and is followed by a short presentation from a member of senior staff and a concert by students from the Department. Prospective students' can have a one-to-one talk with a member of academic staff who shares similar musical interests.

### 3.2.3. The Medical School

The School takes part in three University Open Days, offering afternoon sessions of informal lectures and skills' demonstrations for applicants and their parents. The School organises two 'Medicine and Manchester' full day seminars in April and July. These consist of informal lectures and skills workshops. The Admissions team maintain a presence at careers fairs in the area and are active in Schools Liaison activity.

## **3.3. Pre-Induction**

### 3.3.1. Materials Science

The Materials Science Centre has introduced a pre-induction questionnaire this summer. The questionnaire is designed to encourage students to reflect on their skills and personal development options. Students bring the questionnaire back to the Centre and it forms the framework for the early personal tutor meeting in Induction Week. Initial student feedback has been positive with the students welcoming the continuing contact.

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<sup>8</sup> Only departments at the University of Manchester were asked about their current recruitment practices.

### 3.3.2. The Dental School

All students who firmly accept a place after A-level Results Day, are sent a welcome pack including an induction guide designed with the assistance of current students, a questionnaire to form the basis of their PADP activity (focusing on problem-based learning and reflective skills), a booklet of problem-based learning (PBL) and a PBL case study for use in Induction Week sessions.

### 3.3.3. Planning and Landscape

All students who accept a place are sent two letters during the summer prior to admission. First year students receive their own handbook dedicated to the first year experience which augments the standard programme guide and Faculty information as well as all the relevant University material.

### 3.3.4. Chemical Engineering

A skills' audit questionnaire is sent to the new intake to complete and bring with them to their first meeting with their personal tutor, which takes place during Induction Week. This questionnaire allows the student and tutor to discuss future areas for personal development in line with PDP activity.

### 3.3.5. Electrical Engineering and Electronics

A questionnaire is sent to all incoming students asking for information on current skills and areas for development. The department also keeps in touch with the new cohort regularly by telephone and email.

### 3.3.6. Textiles

Students on the Textile Design degree programme are asked to complete a design project over the summer. These projects are then displayed in the department during Induction Week allowing the staff to get a basic idea of the students' skills and allowing the students a chance to meet each other with an icebreaker to discuss their projects.

## **3.4. Induction**

### 3.4.1. Earth Sciences

The department arranges for all students to meet their personal tutors after the introductory lecture. The first weekend of term is taken up with a field trip to introduce students to the study and relevance of Earth Sciences.

### 3.4.2. Materials Science

The Centre has an introductory module that runs during Induction Week and into Week one of full teaching. The module aims to introduce students to the study and use of Materials Science as most of them will not have studied

anything similar prior to University entry. Work for this module is undertaken in small groups or teams and also individually and is worth 10 credits of the first year mark. There are opportunities to use and develop skills in different areas and a chance to reflect and review at the end of the module. The assessment is both individual and group based and covers many different types of assessment, thereby allowing all students to show themselves to advantage regardless of their preferred style. A guide to the module is available on the Materials Science website<sup>9</sup>.

#### 3.4.3. Architecture

A Year One Party is organised at the end of Induction Week. During Induction Week a series of design exercises take place involving the whole year. The students are split into small groups and are introduced to the style of Studio work they will be expected to undertake once the teaching timetable is introduced.

#### 3.4.3. Music

The students take part in a programme entitled 'Working Together for a Performance' which involves working towards a Year One Concert Performance. This is used to help integrate students and enhance their sense of belonging and involvement in the life of the department.

#### 3.4.4. The Dental School

The induction sessions are focused on PBL with two half-day sessions scheduled to take place. In these sessions students work in designated PBL groups with a tutor and student mentors in a series of activities designed to transform the group into a team. This is complemented by three PBL sessions using the case study sent to the students in their pre-induction pack. Students also meet their tutors for tea on the second day.

#### 3.4.5. Government

The School runs a series of presentations of the different module options and all students are invited to meet with a tutor to discuss their options before registering.

#### 3.4.6. Planning and Landscape

A specialised course unit, Study Skills for Environmental Professionals, is used to help settle students into the life of the School. The module lasts for the whole of the first semester and provides a weekly teaching slot with the first year organiser. This unit also serves to integrate PADP activity, which is considered to be a central part of the induction process. In Reading Week of Semester One a series of trips are organised to introduce students to the

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<sup>9</sup> <http://www2.umist.ac.uk/material/teaching/> Click on the link to ML1001: Introduction to Materials Science

region and its environmental issues. Induction activity continues into Semester Two with a Practical Projects course unit also taught by the first year organiser, allowing students to raise any issues they have with the course or the School and allowing the first year organiser to monitor progress and problems across the whole year.

#### 3.4.7. Combined Studies

The induction programme includes a talk from the Director, small group meetings with the Director arranged by study area and informal meetings with second and third year students. Reflecting the unique challenge for Combined Studies students, the Director and his Secretary offer drop-in sessions throughout the week to troubleshoot problems with timetabling and course selection. The department also organises a social event.

#### 3.4.8. Chemical Engineering

The department organises a problem-based learning design activity that extends into Week One of the main teaching programme. It is designed to show students how the main subject areas of the discipline fit together. The design project is also a talking point when students meet their personal tutors and is revisited later in the year to demonstrate progress made.

#### 3.4.9. Foundation Studies

The department provides the students with a 'survival pack'. A lunch is held to introduce students to their personal tutors and academic tutors from their chosen discipline. During Induction Week diagnostic testing is undertaken in mathematics, physics and communication skills.

### **3.5. Personal Tutoring**

#### 3.5.1. Psychology

The personal tutoring system is closely linked to PADP provision in the School. Currently students have five meetings with their tutor in the first year and three meetings in the second year. These meetings are usually one-to-one and tutors are also available to see students by appointments to discuss sensitive issues.

#### 3.5.2. The Dental School

In addition to their PBL tutor each student has two personal tutors. The system is administrated and quality assured by the Senior Tutor and the Associate Dean for Undergraduate Studies. The first informal meeting takes place in Induction Week and a second is scheduled for Week Three following a PASS session. It is advised that meeting should take place once per semester thereafter and be linked to PADP activity.

### 3.5.3. Biomolecular Sciences

Pastoral and academic tutorials are held every fortnight during the first two years of study. In the final year there are three tutorials scheduled each semester. This allows students the opportunity to integrate as a group and to build a good working relationship with their tutors.

### 3.5.4. Chemical Engineering

The first year students have weekly tutorial sessions in small groups looking at various aspects of PDP activity. The Director of Undergraduate Studies has drawn up some resources for tutors in order to structure these sessions effectively. The second year students also have weekly tutorial sessions but these are based around PBL activity. The third and fourth year students meet in groups with their tutors twice each semester.

### 3.5.5. Electrical Engineering and Electronics

Students have personal tutors whom they see at least every two weeks to discuss personal and academic progress. Question sheets and marking are returned to the students via their personal tutors allowing tutors to keep an eye on the individual progress of the students during the year.

## **3.6. Peer Mentoring**

### 3.6.1. Drama

The second and third year students share a number of courses. There is also an active studio group in which all years share workshops and performance projects. The most formal peer support is the 'Student Surgery', which meets once a week.

### 3.6.2. Planning and Landscape

A student buddy scheme was introduced in academic session 2001/02 in which second years acted as mentors for first years. The system has worked well and has been extended to the current session with the intention that it becomes a permanent feature of the teaching and learning environment. The buddy scheme benefited from Student Enterprise and it was decided to extend the initiative. Student mentors have also undergone training provided by Student Enterprise.

### 3.6.3. English and American Studies

Peer mentors are attached to tutor groups on the Academic Development programme in Years One and Two. A PASS scheme operates on the Anglo Saxon Studies course unit in which second and third years offer help sessions to first years.

#### 3.6.4. Music

A peer-mentoring scheme was set up three years ago. Each of the first year tutorial groups is befriended and supported by two or three students from the upper years. The mentors host two lunches in the School during the first semester.

#### 3.6.5. Biomolecular Sciences

The peer-mentoring scheme has run for two years with training for second and third years. The department arranges the mentoring groups and allocates mentors.

### **3.7. Attendance Monitoring<sup>10</sup>**

#### 3.7.1. Pharmacy

Attendance is closely monitored at every lecture, practical and tutorial via a computerised system, which also logs personal information and grades. If attendance drops below 80% then the student is told to attend a session of the Work and Attendance Committee. This tends to have two effects, one of flushing out those students with genuine problems so that the School can offer support and guidance, and that of focusing the minds of those students who have not organised themselves sufficiently and are unaware of how many classes they have missed. For the hardcore of non-offenders the system triggers the possibility of de-registration if their attendance does not improve dramatically. Prior to the Work and Attendance Committee the computerised system automatically sends out warning emails and letters when attendance starts to drop. The students are given the opportunity to improve their attendance before being called before the Committee.

#### 3.7.2. Economics

The School runs a biannual exercise, which monitors all students' attendance. In addition, the Programme Director for the BEconSc monitors work and attendance throughout the year. Tutors are encouraged to report regularly on students' attendance and those students who miss more than two consecutive tutorials are contacted by letter.

#### 3.7.3. Planning and Landscape

With the appointment of a School Administrator for the first time in September 2002, the current academic session has seen a concerted effort to track attendance and apply work and attendance provision in a systematic way. The Administrator has instituted a robust administrative system, in which initial warning letters are routinely sent to students who are absent from class (compulsory and discretionary elements) and personal tutors are appraised accordingly. Initial perceptions are that this system is beginning to reduce non-attendance, although the bureaucratic and unwieldy nature of the work

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<sup>10</sup> Only University of Manchester departments were asked about their attendance monitoring policies.



and attendance provisions continues to create difficulty in applying sanctions against the hard core of absentees.

### **3.8. Disabled Students' Support<sup>11</sup>**

#### 3.8.1. Drama

Applicants with identified disabilities are contacted before arrival with guidance and contacts. All technicians are trained in first aid and carry out an annual safety audit. The School's Special Needs Officer deals with students who are referred or who refer themselves to him.

#### 3.8.2. The Dental School

Past experience has solely been with dyslexic students. After liaising with the Disability Support Unit and obtaining a Statement of Special Educational Need, the student is invited to a meeting with their personal tutor and the curriculum co-ordinator for their year of study in order to discuss their ongoing needs and any adaptation that needs to be made within the teaching and learning environment.

#### 3.8.3. Economics

The School has a Disability Support Co-ordinator who is responsible for ensuring that communication flows easily between the School and the Disability Support Unit. The School has a policy for supporting disabled students and offers all its information material in large print as a matter of course. The School is currently in the process of updating its website and Intranet site to ensure that they are fully accessible.

### **3.9. Skills Based Activity**

#### 3.9.1. Drama

Study Skills serve as the basis for the first year first semester tutorials and Study Skills in Drama packs are given to all the first year students. First year projects concentrate on developing, with instruction, practical skills and involve workshops and research into performance skills.

#### 3.9.2. English and American Studies

Study and transferable skills' training is delivered through the Academic Development programme, which runs through the three years of the main degree programme. It has its own tutorial system for the first two years and is

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<sup>11</sup> Only University of Manchester departments were asked about their structures for supporting students with disabilities or special educational needs. All the departments who responded had in post a member of academic staff who had responsibility for liaising between the Disability Support Unit and the staff in their department. The examples given are, therefore, indicative of departmental activity in excess of the liaison and information role.

the central forum for support in the research and writing of the third year dissertation project.

### 3.9.3. Government

All first years take a Research and Study Skills course. The course is class-based and concentrates on familiarising students with a range of core study and research skills of which they will be expected to show mastery during their time at University. The classroom work is supplemented by twelve outside assignments. These assignments form 33% of the final mark for this module and are returned to the students with feedback and areas for improvement noted. The remainder of the final grade comes from a 5,000-word essay based on independent research in Semester Two of the first year.

### 3.9.4 Chemistry (UMIST)

Transferable skills are embedded in the curriculum. These include project work, poster presentations, information retrieval and essay writing. A booklet produced by the Royal Society of Chemists is given to all students.

### 3.9.5. Civil Engineering

Employing the RAPID system developed at Loughborough University, students are able to enhance their communication skills, job application skills, CV development and PDP activity. Skills are taught through specific modules involving project work or exercises.

## 4. Overview of Current Practice at other Higher Education Institutions<sup>12</sup>

Drawing on lessons from FE practices, several themes emerge about the best way of supporting and retaining students. The first is that practitioners in this area need to use outreach and admissions policies to ensure that students apply and are accepted for courses to which they are well suited and of which they have realistic expectations. This can be achieved by improving pre-entry information, interviewing all students with reference to motivation as well as academic ability and by using open days and induction week to look at staff and student expectations, developing a compact between the two groups. Different institutions have taken different paths towards retention strategies and implementation with the leading institutions in the field coming almost exclusively from the post-1992 universities. Below are some examples of successful strategies and work in progress from a variety of institutions.

### 4.1 Institutional Commitment and Staff Support

Napier University<sup>13</sup> has been looking closing at Student Retention activity for the last 8 or 9 years. They are clear that recruitment policy impacts directly on retention and that one of the main problems for universities is that they are unwilling to accept that the research, development, implementation and evaluation of retention initiatives will take at least 3 years and more likely 4 or 5. The development of a network, including designated faculty or departmental staff members who are directly responsible for retention and support activities in their section, is key to creating a supportive framework for staff to run initiatives and learn from each other. This network also provides a useful point of contact with the central project co-ordinators.

### 4.2 Pre-Induction and Transition to Higher Education

The University of Central Lancashire (UCLan) has done some work in this area. They have developed early engagement strategies, including increased use of summer schools, to orientate students and integrate them into the university environment. They have also worked on bridging the gap between Year One at university and the latter stages of school or college education. They have worked to revise their first year programmes in line with what they can reasonably expect their students to deal with based on current pre-university curricula. The University of Central England (UCE) has set up a 'Breakthrough to Learning' programme for prospective students from the 'widening participation' groups. This programme aims to make HE more accessible through work on academic english particularly in written form. This programme has been thoroughly tested and acts as a bridging mechanism between the university and local schools and FE colleges.

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<sup>12</sup> Hereafter referred to as HEI's.

<sup>13</sup> Extensive information available on the Student Retention Project website at [www.napier.ac.uk/qes/studentretentionproject/SRhome.asp](http://www.napier.ac.uk/qes/studentretentionproject/SRhome.asp)

The University of Abertay, Dundee, has looked closely at the practical side of the student experience in an attempt to resolve factors that de-motivate students during their time at University. Their research has been closely linked with an application of Maslow's Hierarchy of Needs<sup>14</sup> which they has adapted in the figure shown below. They stress the need to address the physiological needs related to administrative concerns before any others.

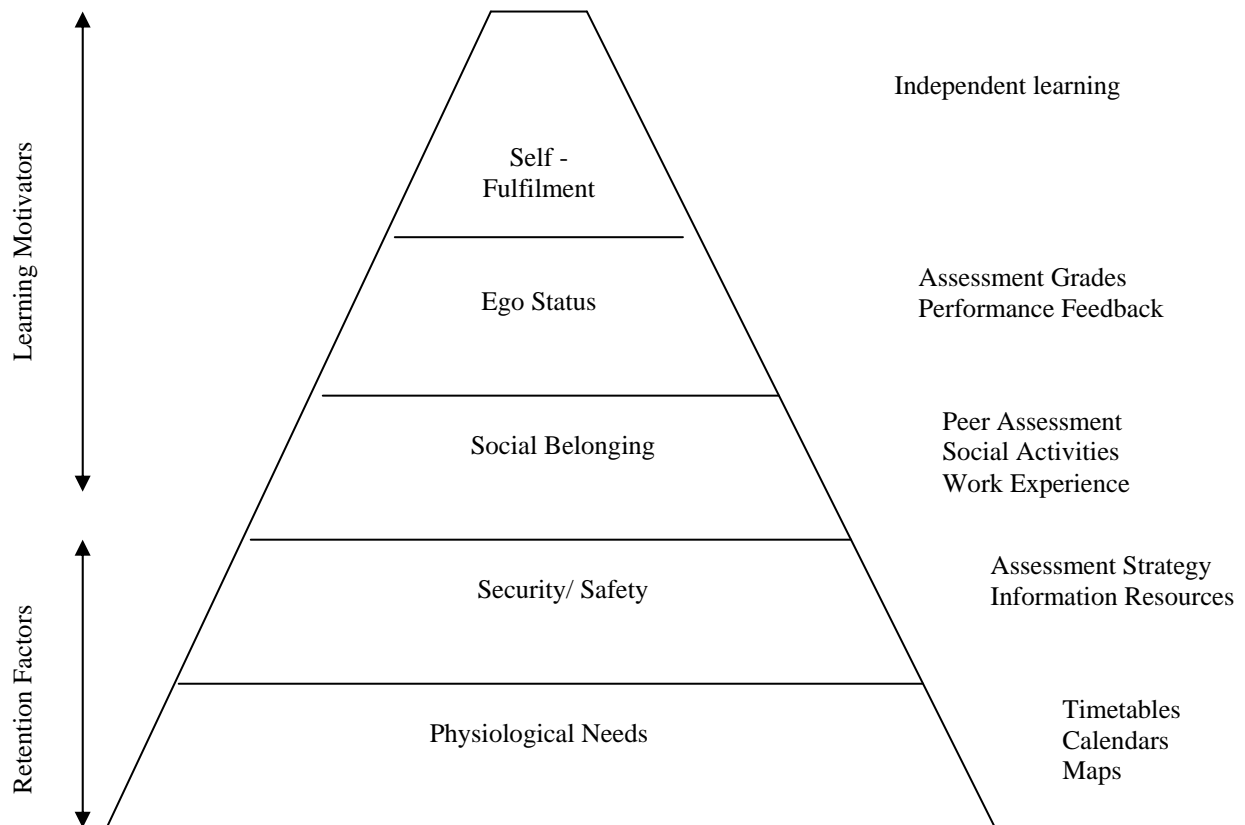


FIG. 4: HIERARCHY OF NEEDS (PRESCOTT AND SIMPSON 2003)<sup>15</sup>

The conclusion at the University of Abertay was that there was a clear need for a proactive identification of administrative weaknesses that serve to confirm a student's worst fears about University. The University must ensure that registration and orientation is successful and that the student induction experience is positive. Once this has taken place, the student is more likely to be in an appropriate and receptive frame of mind to proceed in the learning environment.

#### 4.3 Students supporting Students

UCE has looked at the provision of support for students of placements or sandwich years. For their Midwifery students an online peer-mentoring system with the facility for immediate conferencing has been designed and terminals

<sup>14</sup> Maslow stated that as long as the deficiency needs (the lower four in the diagram) are satisfied then the individual can move towards enhanced personal and social development as he/ she are no longer constrained by lower order concerns.

<sup>15</sup> Poster Presentation at the 1<sup>st</sup> Annual SHERF Conference at the University of Paisley March 21<sup>st</sup> 2003. Presented by Ann Prescott and Edward Simpson, University of Abertay, Dundee

have been placed in the NHS Trust hospitals where these students are working. Whilst this system was originally designed to allow students to form learning networks it has been more successful as a psychosocial support network.

One of Napier University's many projects involves student guides. Twelve student guides were trained in customer care and referral procedures and were available to speak to students during one lunchtime each week during term-time, at one of five designated Student Information points. They handled queries on careers, academic and disability support, funding, access to sports facilities, accommodation, international student queries and several other matters.

#### 4.4 Supporting the Transition to Independent Learning

At Queen Mary's (University of London) research has shown that non-traditional students do not feel sufficiently prepared for the university experience. The students feel that they lack the key skills necessary to be successful at university and that they do not know what they need to do to pass the course. Essentially they do not know what is expected of them. Many students arrive at university not realising the level of independent learning that they will have to achieve to be successful. For those students in the 'widening participation group' these problems are compounded by problems with social integration and personal commitments. At Queen Mary's good practice guidelines have been developed involving mentoring schemes, developing good personal tutors links, good quality information on the course and expected learning outcomes and clear linkages between different aspects of the course and between theoretical and practical work.

UCE has also developed a system of formative assessment for testing conceptual points. They found that many of their students were struggling to grasp the underlying meaning of academic terms if that meaning was separate from the meaning of the word in standard English. They developed a system that tested students' understanding of the terminology of their subject and directed them to helpful resources.

The University of Paisley has looked at developing resources to encourage greater critical language awareness, particularly from those students who are unfamiliar with the conventions of academic writing or for whom English is a second language. They have encouraged academic staff to act as guides to the language of their discipline; many students find the level of linguistic comprehension necessary even to understand the set reading is beyond them without some early training in the style and vocabulary of the subject. Some staff development work has ensued to encourage staff to be aware that their subject is a forum for specialist or expert discourse and that students need to be encouraged and supported in their early engagement with the linguistic complexities of their chosen area of study. This carries over into administrative dealings as students need clarity in registration and pre-registration information to avoid confusion and early disillusionment with university life.

#### 4.5 Forms of Assessment and Testing

The Student Retention Project at Napier has designed a self-administered diagnostic test for students, available on their website and advice booklets for those students having qualms about their university choices.<sup>16</sup>

Another innovation in improving progression rates that is of particular relevance to UMIST and the University of Manchester is the CALMAT project<sup>17</sup> at Glasgow Caledonian University. The Mathematics department has Computer Assisted Learning (CAL) software to develop a new summative assessment strategy by looking at the following main areas:

- Learning materials with integrated tutorials and assessments
- Separate tutorials and assessment systems
- Management system
- Designer for creating HTML pages with links to CALMAT components
- Player for the delivery of the Designer's HTML pages
- Diagnostic testing facility
- Records controller

The system enables students to get a measure of their achievement and helps to consolidate their learning. The students get instant feedback to aid improvement and to encourage them to engage in the learning process. The tutors can get feedback on effectiveness and programme co-ordinators can get statistical information on areas of weakness across the cohort. In the Glasgow Caledonian model, students who scored 70% or higher were exempted from taking final exams. This seemed to motivate the students to work harder during the term. The number of exemptions has risen over the three years that the project has been in place. Student feedback was very positive and many would have liked more use of CAL in the curriculum as they felt it helped to keep the momentum going.

#### 4.6 Creating Central Resources

The University of Aberdeen is in the process of developing an Academic Learning and Study Unit with a wide remit to identify strategies for study skills support, work within departments to improve skills support, offer direct support to students through workshops and individual sessions, establish a network of support across the University and identify retention factors for 'at risk' groups. The Unit is due to open for the 2004/05 academic session but will be offering a provisional service from May 2003. Workshops for students and individual sessions will be provided as will online resources, the development of induction courses in each faculty is being strongly encouraged, a scheme to provide pre-resit support is being considered as is a central resource library. The Unit will be involved in the provision of learning support for some disabled student particularly those with Dyslexia or similar learning difficulties. The Unit will have a research role in the identification of gaps in student support provision. This type of Unit represents a clear acknowledgement by

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<sup>16</sup> Details of the diagnostic test can be found at <http://www.napier.ac.uk/qes/studentretentionproject/Diagnostictest/Dpageone.htm>

<sup>17</sup> Details can be found at [www.gcal.ac.uk/calmat](http://www.gcal.ac.uk/calmat)

the University of Aberdeen that student support requires a large resource commitment and a wide-ranging yet central role.

## 5. Conclusions

Both UMIST and the University of Manchester have strong basic structures in place to deal with student support issues. There are clearly defined and well-resourced centralised services such as the Student Counselling Service, the Careers Service, and at University of Manchester, the Central Academic Advisory Service. These areas have not been discussed in this report as there is a great awareness of these services and the activities that they offer. However student support is often at its weakest in departments and faculties as other areas of the University have been traditionally expected to take up the challenge of providing support. In the changing admissions and recruitment environment it is necessary to look at the needs of a new type of student. Non-traditional students face different challenges and have different perceptions of the way that support functions in a university environment. The atomistic, independent student life is a distant hope for some students who will require extra support to integrate into the academic and social life of their department and of the university. As education providers we must be aware of how we approach the provision of support with an emphasis on accessibility for all students. In the teaching and learning environment we need to develop a greater awareness of the ways in which we communicate with students. Some students may never have seen an academic essay, researched a project or read a higher-level text. In the current education system there is a concern that secondary and further education serves to 'de-skill' students to push them through exams and assessments. The skills we expected from new undergraduates now need to be taught remedially to many students, preferably explicitly in the curriculum to demonstrate their relevance to a student body with increasing demands on their time from external agents such as employers or families.

We have a responsibility to those students that we accept to provide them with the opportunity for personal development and to reach their potential. There are several areas that could be looked at in order to develop a supportive framework. Firstly, the clarity and consistency of information and documentation sent to prospective students from their first enquiry until their graduation day needs to be ensured. Students leave university for a multitude of reasons and we have no need to add to the factors inspiring them to withdraw through administrative slips. Secondly, the time between formal acceptance and the end of the first semester needs to be looked at carefully. For many students this is a time when they have doubts about their choices, start to feel home sick, have problems integrating or need support to make new and positive choices about their future. For those students entering through Clearing this is a time of rushed decisions perhaps linked to disappointment in their grades or changes in their personal circumstances. We need to make support services available through as many access points as possible so that there is no stigma attached to seeking help, whether it is within their department or from a central service.

One major point that all those involved in the care and support of students need to be aware of is that not all choices to withdraw from university are negative. For many who withdraw it is because they have reached their goals or have realised that they are better suited to take a different path in life. A full retention rate is an impossible target, and perhaps would be unhealthy for some students. Instead we need to work towards optimum retention.



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