



## "Supporting Students in Transition"

# **Post Proceedings**

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### Forward

The thirteenth biannual conference of the Confederation of Student Services in Ireland was held at National College of Ireland in June 2011 and was attended by over 150 delegates. The theme – *Supporting Students in Transition* – was a timely and provocative theme that generated some fantastic diversity in both paper submissions and workshops.

This publication, which I am proud to introduce, captures some of this diversity and innovation, highlighting themes from academic supports, pastoral supports, disability supports, teaching and learning and skills development.

As always, however, CSSI events are not just an opportunity to produce papers and workshops, but rather are an opportunity to come together as a community of learners, share stories and meet prominent Keynote speakers. On that note, I'd like to thank Dr. Tony Bates, from Headstrong and Professor Richard Mullendore, from the University of Georgia, who brought humour and passion to the topic of transitioning into and out of college life.

I'd also like to thank the CSSI Committee for all their support and direction throughout the planning and proceedings of the conference. We really could not have done this without you.

Finally, thank you to each and every delegate for showing their continuing support to CSSI.

Dr. Mike Goldrick

CSSI Conference Committee / National College of Ireland







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## **Discover University – Transitional Skills Development**

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#### Abstract

Discover University is a week-long summer programme aiming to raise young people's personal and educational aspirations by offering them the opportunity to experience a taste of life in National College of Ireland (NCI). Designed for young people aged 14-17 years from disadvantaged and minority communities, the programme offers a mix of academic taster programmes along with a range of fun and challenging extra-curricular activities. A key element of the programme is a Problem Based Learning (PBL) Project, where participants work in small groups to solve real-life community problems. Third level students are involved as team leaders. Their role is to act as positive role models for the second level students and to encourage, support and guide the young people through the PBL projects and other activities. Analysis of the formal feedback from evaluation forms and interviews as well as documentary evidence, informal feedback, observations and field notes inform the findings of this paper. This paper will outline how the Discover University Programme, in particular the PBL project, supported both the second and third level students in developing a positive set of attitudes, learning dispositions and skills that will support them, not only through second and third level education, but also through life.

### Introduction

Access, transfer and progression to and through third level are key elements in ensuring that students from educationally disadvantaged and minority backgrounds are able to attain maximum benefit from the educational system. Discover University is a week-long summer programme, which aims to raise young people's personal and educational aspirations by offering them the opportunity to experience a taste of life in National College of Ireland (NCI). It is one element of the Early Learning Initiative's (ELI) suite of programmes, which support young people and their parents to continue to and achieve in third level education. Designed for young people aged 14-17 years from educationally disadvantaged and minority communities, the programme offers a mix of academic taster programmes along with a range of fun and challenging extra-curricular activities. A key element of the programme is the opportunity for participants to work together in small groups to solve real-world problems, using a Problem Based Learning (PBL) approach (Barrett, 2005). Third level students are involved as team leaders. Their role is to act as positive role models for the second level students and to encourage, support and guide them through the PBL projects and other activities. This paper will outline how the Discover University Programme, in particular the PBL project, supported both the second and third level students in developing a positive set of attitudes, learning dispositions and skills that will support them, not only through second and third level education, but also through life.





### Methodology

As with all ELI programmes, a community action research was used to develop Discover University. According to Senge and Scharmer (2001, p.240), action research begins by creating a learning community that works together to 'nurture and sustain a knowledge-creating system', based on valuing equally each other and the following three interacting domains of activity:

- Research: a discipline approach to discovery and understanding, with a commitment to share what is learned.
- Capacity-building: enhancing people's awareness and capabilities, individually and collectively, to produce results they truly care about.
- Practice: people working together to achieve practical outcomes.

The participatory nature of this methodology lent itself to the collaborative development of the Discover University Programme, where the expertise and experience of all the participants were acknowledged, respected and utilised. The collaborative approach operated at two levels. Level one focused on the overall direction and development of the programme, while the PBL project considered real life community problems, which the students were asked to address. The action research process of identifying a problem, planning an intervention, implementing the intervention and evaluating the outcome (McNiff and Whitehead, 2006) and the PBL process outlined below, are very similar.

Problem Based Learning is defined as:

The learning that results from the process of working towards the understanding of a resolution of a problem. The problem is encountered first in the learning process (Barrows and Tamblyn, 1980, cited in Barrett, 2005 p.14)

Although processes can vary between sites, the common characteristics are that students work in small groups to address real world authentic problems and typically follow a series of steps to guide the learning process. For the purpose of the PBL project with Discover University, we used an adapted version of the process guide by Barrett et al (2009) which was originally adapted from Barrows, 1989 and Schmidt, 1983.







### Steps in the PBL Process

- 0. Set the climate: assigning group roles and ground rules within the group and giving a brief overview of the PBL process
- 1. Read the problem carefully: Clarify any unknown terms and concepts you are unsure of
- 2. Define the problem: Write the problem in your own words

3. Analyse the problem: 'Brainstorm' and come up with possible solutions using prior knowledge and common sense

4. Evaluate the solutions proposed and decide upon an agreed approach

5. Identify what is unknown information and formulate learning issues for self-directed learning (SDL)

6. Carry out the SDL with individual research, study and practical work

7. Share findings with the group and try to integrate the knowledge acquired into the solution of the problem. Make and carry out an action plan (You may need to revert back on the earlier steps as new knowledge is discovered and needs to be incorporated into your understanding and solution)

(Adapted from Barrett et al, 2009, cited in Barrett and Cashman, 2010, p.9) Figure 1: Steps in the Process

Proponents of PBL argue that it is a pedagogical approach that not only fosters a deeper understanding of curriculum knowledge, but also transferrable skills such as selfdirectedness, problem solving and collaborative working skills (Barrett, 2005; Clancy, 2000; Ertmer, 2009). It is well recognised that these are the skills, attitudes and competencies required for successful transition from second level, and success in third level education and the workplace (Gibbs et al, 1994). Therefore, through their involvement in this programme, it was hoped that the students, both second and third level, would be enabled to develop these skills to support them at second and third level and also that they will be motivated to strive for their goals and move on to a third level course of their choice.

Defining roles at the beginning of the Discover University programme and in particular for the PBL project was important to ensure that the expertise and experience of all were fully utilised. The coordinators were responsible for the day to day management of the programme and the communication with the community organisations, NCI faculty and third level team leaders. Faculty delivered the academic taster programmes and were there to support and guide the participants through the PBL projects. Working with faculty and coordinators, the third level team leaders encouraged, supported and guided the second level students through the PBL project. Acting as positive role models for the young people, they were also responsible for supervising groups and managing behaviour during other activities e.g. company visits, breaks etc. The potential for older, more experienced students to support younger less experienced students is well documented in the literature of peer mentoring and tutoring (Kram, 1983; Topping, 1996) and it was hoped that the team leaders would fulfil this role on Discover University. The research has also acknowledged that both the mentor and mentee (Phillip and Hendry, 2000), and tutor and tutee (Topping, 1996) can benefit from such experiences.

The development of a shared statement of purpose and a set of guiding principles as well as an infrastructure that supported team building (Senge and Scharmer, 2001)





provided a framework for the programme. This included an induction process for both second and third level students that included sessions on team building, NCI policies such as the Code of Behaviour, Anti-bullying and IT Acceptable User policies as well as introduction to the PBL process which according to Little (1997) is vital for the success of a PBL project (cited in Barrett, 2005). In addition, the third level students received training on working with young people, Health and Safety and Child Protection Guidelines. A 'combined teaching structure' (Alvestad and Rothle, 2007) i.e. mixed, flexible, dialectal teaching, was used in these sessions. Lecture style information sessions were interspersed with group activities, which gave the young people an opportunity to discuss and work together on various issues. At these sessions, students got the opportunity to meet their team members and develop a group name and contract. They also assigned various roles to each team member, for the purpose of the PBL project. As well as establishing the infrastructure for the programme, these induction sessions ensured that the participants had an input into the development of the programme. Through the various activities, their voices were heard and they had an opportunity to bond with the rest of their team.

The PBL process provided a clearly defined structure (Barrett, 2005, Ertmer, 2009) within which the young people had to work when addressing the issues raised by the community organisations. On the first day, the community organisations came to NCI to pitch their problems. These included how to redesign a local park to meet the needs of teenagers, how to encourage more young people to get involved in a community organisation and finally how to get older people to get involved in an IT project with young people. Having listened to the pitch, the students began their seven step process, discussing the problem and brainstorming possible solutions, followed by their own individual research into the issue. This involved visiting the organisations, researching using the internet and other facilities and getting support from faculty. Having worked on the problem throughout the week, they presented their solutions on the final day in both multimedia and poster format at a showcase, to which their friends, families, community organisations and the Lord Mayor were invited.

Action research incorporates continuous self-evaluation (Koshy, 2005), and opportunities for reflection are core to the PBL process (Barrett, 2005). The Discover University Programme was evaluated on an on-going basis using participant observation, feedback from participants and other stakeholders along with individual evaluation forms at the end of the programme. The evaluation forms consisted of a series of closed and open questions. The closed questions contained a list of statements, which participants were asked to agree or disagree with. The statements focused on whether the participants found the overall programme interesting, if they had made new friends and if they felt they had developed their skills in areas such as group work, communication, leadership etc. They were also asked to consider how their attitudes towards college had changed as a result of the experience. The open questions gave participants the opportunity to describe what they considered were the best things about the programme, what aspects, if any, would they change for the future and what they had learned about themselves and from others during the week.







### Findings

Analysis of evaluation forms, participant observations and feedback from participants and stakeholders inform these findings. Both formal and informal feedback from students, parents, team leaders and other stakeholders was very positive. All enjoyed the experience and felt that both the second level students' and team leaders' skills and confidence had improved as a result of the programme. The words used the second and third level students are outlined in figure 2.

Themes mentioned by second level participants when evaluating Discover University in order of frequency	Words used by team leaders to describe Discover University in order of frequency
People skills/team work	Fun
New people/friends	Experience
New skills/subjects	Valuable experience
Fun	Encouraging
Sense of life in College	Inspiring
Communication skills	Discovering
Confidence building	Enjovable experience
Project work	Learning experience
Teachers	Interesting
Drama	Energetic
Problem solving skills	

Figure 2: Themes and words used by participants in describing Discover University

One second year student summed it up as follows:

*I really enjoy did the Discover University course. The best thing was getting to know new people and how is the life in a college* 

All the second year students (100% N=34) agreed (60% strongly) that both their communication and group-work skills had improved over the week. As one student said: *I feel I have improved on my communication skills and also working as a group in* 

projects. Another aspect I enjoyed was the drama class. I thought it was fun because it involved working as a group and movement of the body

Problem solving was a key element of the programme and 92% agreed (46% strongly) they had improved their problem solving skills. This was described by one second level student as follows:

*I learnt how to solve a real life problem by organising and working as part of a team. The experience has taught me how to approach problems systematically* 





and logically, so I have a method of tackling not only other people's problems but mine too

In addition, 96% of students reported having made new friends on the programme. From students' responses, it appears that working in groups really helped them get to know and develop friendships with others.

I really enjoyed the group work. I liked my team and the activities. I met lots of new people from different areas and backgrounds and made a bunch of new friends.

Raising young people's aspirations is a key element of the Discover University Programme. As a result of the programme, 92% of the second level students were more excited about going to  $3^{rd}$  level than they were before the programme. Parents agreed with these findings, with 100% (N=19) of parents agreeing that their children were now more excited about and had a better understanding of third level education. One parent said:

This programme is very worthwhile and I suggest that students get this opportunity again before they finally get into college. It is quite motivating for my child and she is now very enthusiastic to get into college. Well done for a good job done

While it appears that the second level students did benefit greatly from the programme and the skills and attitudes they will require for third level had developed further through the programme, there were challenges that will need to be addressed in further programmes. These included staff observations that students were finding it very difficult to use the project guide sheets and were ignoring team roles. In addition, there was some resistance at times to questioning and probing from faculty about their project with a tendency from the teams to go with their first idea. This meant that the higher order skills such a critical thinking, analysing and in-depth problem solving were sometimes not being used and developed. For faculty, there was a difficulty balancing the development of these skills with respecting the autonomy of the group to come with their own solutions.

The findings for the third level team leaders were similar. All (100% N=8) strongly agreed that they enjoyed being a team leader and felt that it was a valuable experience. As one student stated:

A great learning experience not only for the students but for us team leaders as well

The third level team leaders (100% N=8) also felt that their skills improved. These included their communication skills (6 strongly agreed), problem solving skills (6 strongly agreed) and leadership skills (4 strongly agreed). They also agreed that they were better at working in a diverse group (6 strongly agreed) and with people from different backgrounds (7 strongly agreed) since participating in Discover University.

*I learnt that I actually have loads of underlying skills in me that I need to work on in order to prevail in certain unforeseen circumstances* 





While the Discover University Programme was a learning opportunity for the third level team leaders, there were difficulties. This included ensuring the team leaders adhered to their role as a facilitator of the group rather than a participant. Some were inclined to adopt the various roles assigned to individual members of the group rather than prompt and encourage the second level students to take on the role given to them by the group. In addition, role boundaries between the team leaders and faculty were blurred with team leaders resisting what they perceived as 'interference' by faculty. Finally, there was the time pressure of ensuring that project was completed in time for showcase with 36% of team leaders requesting more time for the projects.

### Discussion

The main focus of the Discover University programme was to raise young people's personal and educational aspirations by offering them the opportunity to experience a taste of life in Higher Education. While the experience raised their interest in acquiring a third level education, it also enabled them to make new friends and further develop the skills and confidence required for a third level education.

Using PBL gave a structure to the students learning and allowed them to deepen their understanding of the community issues. It also helped them to develop a positive set of attitudes, learning dispositions and skills that would support them at both second and third level. This is supported by the research of others such as Clancy (2005), who reported that participants stated this type of learning was motivational and self – empowering. Working in teams on real-world problems enhanced the participants' capabilities, both individually and collectively, to produce results they truly cared about (Senge and Scharmer, 2001).

While all of the young people reported that Discover University was an enjoyable experience, Barrett (2005) points out that learning in PBL is "hard fun". 'Learning in PBL demands both the fun of playing with ideas and the hardness of refining and reworking ideas' (p.122). The PBL element was challenging for both the second and third level students. The need to balance process and product was difficult and there was tendency to focus on immediate easily implemented action plans rather than more time-consuming systematic reflective enquiry. This is reflected in the literature on PBL with regard to the challenge in getting second level students to engage in systematic enquiry (Edelson et al, 1999) and the discussion around the use of scaffolds for PBL, such as guide sheets, without negatively affecting the motivation and autonomy of the students (Schmidt et al, 2011).

Using NCI third level students as team leaders and mentors was an important element of the programme. Acting as positive role models for the second level students, they encouraged, supported and guided the young people through the PBL projects and other activities. This helped the team leaders to develop further their own leadership, mentoring and facilitation skills, which would be useful to them, not only during their time in third level, but also in their future careers (Kram, 1983). This appears to confirm the views of Phillip and Hendry (2000) and Topping (1996) that mentors and tutors can benefit themselves from such activities.

However, it was evident from both the formal and informal feedback that more clarity was required around role boundaries in the PBL process. Further dialogue and training was needed for team leaders, faculty and support staff to understand and adjust to their role as facilitators of learning rather than the more traditional direct instructive role. This has been recognised in the research as one of the key success factors in implementing PBL (Little, 1997 cited in Barrett, 2005). While trying to ensure that there is trust and reciprocity between the various adults (Elliot, 2010) and an appreciation that





each has a different role and level of expertise, there is a need to stress that all are equal in personal and professional value (McNiff, 2010) and that individual role boundaries have to be respected. This will require a careful negotiation and establishment of trusted relationships (Herr and Anderson, 2005) as well as the creation of a safe yet challenging space (Li, 2008).

Using the community action research approach (Senge and Scharmer, 2001) was critical to the success of the Discover University Programme as it allowed all the participants a voice in its development. Providing opportunities for reflective practice and dynamic conversations (Schön, 1983) were key elements in this process, which enabled everyone to work together and ensured that the programme was developed to meet the learning needs of the participants. This was particularly important as action research is full of twists and turns and things are not always predictable (McNiff, 2010). By being aware of how the different participants were experiencing working together and how they were processing and interpreting that experience (Coghlan and Brannick, 2001), the project team could adjust the programme to ensure that there was a connection between the programme and concrete problems with which participants were already engaged and eager to learn.

### Conclusion

The week-long Discover University Programme gave second level students an experience of third level education that included academic taster programmes, fun and challenging extra-curricular activities as well as the opportunity to participate in the PBL project. During the week, they experienced success, made new friends and further developed the skills required for college. For these second level students, not only did Discover University raise their interest in and aspiration for a third level education but the involvement of the third level students convinced them that it was within their reach.

For the third level students, it was a valuable experience in leading and managing a project team. Their self-confidence and communication skills improved and they learned how to facilitate and mentor other young people in a friendly, yet assertive way. Being a team leader helped to sustain their interest in and commitment to their own education and future career. It also gave them an insight into the responsibility of managing and participating in a team project, which will be useful to them in their future career.

Finally the quality and practicality (Fullan, 1992) of the PBL project and process was important to the success of the Discover University Programme. Through the creation of a positive collaborative learning environment, it gave direction, meaning and motivation (Tuohy, 1997) to all the participants. Together, both second and third level students explored and came up with innovative and creative solutions to serious social issues. Through their interactions with each other and the communities concerned, their skills and confidence improved such that the students' belief in their ability to succeed at third level was enhanced.

The Discover University Programme allowed young people from disadvantaged and migrant communities to experience life in a third level institution. It helped to persuade them that making the journey to higher education and thereby improving their career opportunities was possible. Many of the young people came through the doors of the NCI and indeed any third level institution for the first time in their lives to participate in the Discover University Programme, and left with the knowledge that third level education was fun, interesting and most importantly that it was a very real option for them.



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### **Biographical Information**

Dr Josephine Bleach is Director of the Early Learning Initiative (ELI) at the National College of Ireland, while Brigina Crowe is the Coordinator of ELI's Stretch to Learn programmes (6+ years), which includes the Discover University Programme. ELI works in partnership with a range of stakeholders in the Docklands to provide educational support programmes. For further information on all ELI programmes, visit our website: www.ncirl.ie/eli.





# Supporting students with disabilities in transition through university - the student journey approach

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### Abstract

Supporting students in transition is not exclusive to the transition of students from 2nd to 3rd level. The 'student journey' approach views transition as an ongoing process across 3 phases, including progression and retention within 3rd level and the move to employment. The Disability Service in TCD seeks to develop clear and effective support systems at all transition phases in this journey. Integral to these developments are research projects which seek to establish strong evidence based evaluations and solutions. The overall aim of such research is to widen participation of people with disabilities both in higher education and into employment.

Within the context of the student journey, this paper will focus on the transitional support needs of students with disabilities during their time in 3rd level education. The relevant research question at this phase seeks to establish how the provision of supports and accommodations for students with disabilities impacts on rates of progression and retention, compared to their non-disabled peers.

Initial findings indicate that students with disabilities are more likely to complete degree courses in TCD compared with non-disabled peers. Factors influencing the retention and progression of students with disabilities have not been adequately researched in the Republic of Ireland. Research conducted within the Irish context has focused on retention across the general student population, attributing student withdrawal (in TCD) to responses given to surveys and exit interviews. However, an increasing diversity of student population means there will inevitably be a greater diversity of influencing factors.

### Evidence based supports

The Disability Service at TCD is developing an evidence base to the provision of supports for students with disabilities during the transitional phases of the student journey. Increasing financial constraints and the social capital policies of the OECD form the wider context of these developments. In a recent OECD presentation on participation of disabled students in higher education the focus was on preventing drop out and the inclusion of transition issues in policies and practices (Ebersold, 2010).

Our own experience in the Disability Service has shown that the support needs of students change over time even if the impact of a disability remains the same. These support needs are most likely to change in response to transitional phases of the student journey; from various sources into higher education, through a variety of routes through higher education and from higher education onto further study or employment. The





journey usually starts in secondary school but the transition into higher education can take many different pathways; repeat leaving certificate, deferred entry, internal transfers, mature students and those who avail of other access routes.

The journey through higher education is not necessarily straightforward either. Course satisfaction, annual progression and timely graduation are not guaranteed. Although it passes quickly (looking back), the four year degree at TCD can be fraught with difficulties; personal, academic and financial, to name a few. Having a disability during these transitions requires supports to be responsive to where students are at in their journey. After higher education, as the needs and the journey continue into the search for and the taking up of employment, therefore the appropriate supports should be in place too. Graduate feedback and reports from mentoring and employment programmes indicate that graduates with disabilities (particularly those with visible disabilities) find it difficult to access work in comparison to non disabled graduates.

The need for evidence based supports stems, not just from the ever pervasive economic need to 'do more with less,' but also from the need to gain a deeper understanding of the needs of students with disabilities and the supports that have the greatest impact in relation to the point they are at in their student journey. International evidence on factors that contribute to a positive student experience all converge on similar themes. Tinto (1993) provided the standard framework of academic and social integration as a means of expressing two sides of student experience which contribute to students either persisting or leaving college. Similarly, in the general student population in the UK, Yorke (1999) reports that factors which influence drop out are; a poor quality of experience, an inability to cope with course demands, dissatisfaction with social environment, wrong course choice and financial problems.

In addition, UK HESA statistics indicate that student withdrawal is likely to be linked with; coming from low-participation neighbourhoods, being in receipt of Disabled Students Allowance and being a mature undergraduate student (HESA, 2011). In general, there are lower rates of completion among students from lower social economic groups. As the relationship between entry characteristics and rates of withdrawal is so strong, it is vital that each higher education institute responds to its own students and gets to know their particular needs.

Retention strategies and formulas are widely available online and in libraries. Seidman's retention formula encapsulates a multitude of dynamic factors in a deceptively simple (if not too simple) one line policy: 'Early identification of students at risk; and early and intensive continuous intervention' (Seidman, 2005). In practice, the students at risk are the ones not showing up for lectures, so getting them to attend or engage with 'intensive continuous intervention' is a real challenge. If students have a disability then it may seem reasonable to assume that this challenge is even greater. However, this is where the research suggests that such assumptions should be rigorously questioned.

### Retention of students with disabilities

Getzel (2008) focuses on the particular characteristics that students with disabilities need to focus on if they are to increase their chances of dealing successfully with all the challenges presented to them in higher education. These include self determination skills, self management skills, exposure to assistive technology and the promotion of





career development. Such key strategies and supports are necessary to narrow the gap in completion rates:

Although the gap for high school completion is closing between individuals with and without disabilities, completion rates for young adults with disabilities in postsecondary education do not parallel this trend (Getzel 2008 p.207)

If the US research literature on the retention of students with disabilities indicates that having a disability significantly decreases a students' chance of completing their course, the UK research indicates the opposite:

We identified a common issue across institutions relating to students with disabilities. Some students with disabilities are entitled to financial assistance (Disabled Students' Allowances), with the funding coming from the Department. We found that students receiving an Allowance are much more likely to continue their course than other students self-declaring a disability and, indeed, than students who are not disabled (National Audit Office, 2007, p.12)

...both full and part-time students who declare a disability are slightly more likely to continue than those without a (declared) disability when all other factors are held constant. (National Audit Office, 2007, p.20)

While these differences may be explained by the receipt of the Disabled Student's Allowance in the UK, in Ireland, where the fund for students is accessed and managed by the Disability or Access service, the completion rates of students with disabilities was recorded at 85.4% (based on a 2005 intake) compared to the general student nationally with a completion rate of 83% (based on a 2004 intake) (Pathways to Education, 2010).

### Traditional TCD student

The 'traditional student' attending TCD may be imagined to possess an enviable combination of luck and talent i.e. a privileged background accompanied with a high academic ability; if only in comparison to the 'non traditional student' who can be considered to lack one or both of these and may also be considered (with their peers) to make up the remainder of the student population. However, a third category of student is probably the most numerous of all, consisting of students who are uncertain as to whether they are traditional or not. Despite this blurring of student identities, TCD continues to take the most students with Leaving Certificate results of 550 points and above (HEA, 2009). A key indicator, as far as this paper is concerned, is that the retention rate of the general student population in TCD averages 85% annually.

### The Disability Service in TCD

The Disability Service (DS) began in June 2000 with 135 students (1.5% of the general student population). By June of 2011 there were 818 students representing 4.9% of the general student population. The overall TCD student population in is 16,807 (09/10). According to a recent report, the retention rate of students with a disability entering TCD in 2005 is 93% (Pathways to Education, 2010). This corresponds closely with our own figures recorded in DS since 2005. Tables 1 to 4 below indicate overall retention rates for 1,303 students who were registered with the Disability Service during the period January 2007 to June 2011, with details given for the sub groups; supplementary entry, mature





entry and merit entry. The figures show that across the 3 sub groups, the withdrawal rate varies only between 6.28% for supplementary entry and 7.29% for mature entry. However, it is important to point out that the majority (over 60%) of these 1,303 are current students who disclosed post entry. This is the result of a significant increase in students who registered in 2009 and 2010 compared to those who registered in previous years.

Table 1: Total students registered with DS 2007 to 2011

All DS	Number	%
Current	819	62.84
Graduates	399	30.62
Withdrawn	85	6.54
Total	1,303	

Table 2: Supplementary entry: DS 2007 to 2011

Supplementary	Number	%
Current	173	63.13
Graduates	81	29.56
Withdrawn	20	7.29
Total	274	

Table 3: Mature entry: DS 2007 to 2011

Mature	Number	%
Current	126	65.96
Graduates	53	27.74
Withdrawn	12	6.28
Total	191	







Table 4: Merit entry: DS 2007 to 2011

Merit	Number	%
Current	520	62.05
Graduates	265	31.65
Withdrawn	53	6.32
Total	838	

The Pathways to Education report (2010), tracked the progress of students with disabilities who entered 9 higher education institutions in 2005. In general they found that students with disabilities who leave higher education are (similarly to their non disabled peers) most likely to leave in their first year. However, they also found that students with disabilities, compared to their non disabled peers, are more likely to graduate and more likely to take longer doing so.

### **Research questions**

This background data leads to certain questions; what is it about students with disabilities that make them more likely to complete their degrees? Is it the supports they get? If so, which ones work best? Is it student characteristics? Can these supports (or student characteristics) be applied to the general student population? Also, compared to the findings in the US and UK, what factors are unique to Irish students with disabilities? The Disability Service in TCD is researching these questions in order to inform an evidence basis for the provision of supports.

### A retention service for students with disabilities

The Disability Service functions as a retention service for students with disabilities in that everything we do is focused on supporting students in pursuit of their academic goals. The first phase of transition begins in the secondary school system. It is important that students with disabilities identify and match themselves to transitional supports at an early stage. The Pathways to Trinity website (<u>www.tcd.ie/pathways-to-trinity/</u>) aims to provide students with all the information they need to successfully apply to and gain a place in higher education.

The vast majority of students with disabilities (as the data above indicates) make the transition into and through higher education successfully. However, a minority struggle and withdraw at some point after registration. An initial data analysis of the 85 students with disabilities who withdrew from TCD indicated that a number of entry characteristics were present and require further investigation. It emerged that in addition to the universal factors that the research on student retention already demonstrates i.e. prior educational attainment and social economic background; students with disabilities were, more likely to have a mental health difficulty than any other disability, more likely to





withdraw in 2<sup>nd</sup> or 3<sup>rd</sup> year as opposed to 1<sup>st</sup> year and finally, more likely to have not taken up or to have disengaged with supports in the months prior to withdrawal. It is important to point out that while this likeliness is significant it is by no means a dominant feature of students who withdraw. Most students with mental health difficulties avail of supports and remain on their courses until graduation. In addition, the majority of students who do not take up or disengage with supports still succeed.

Work is continuing in identifying 'at risk' students based on previous students in TCD who have withdrawn. The crucial point of identifying these factors is to narrow the interventions of the service to those few students who are most at risk at particular times of the year. For example, we don't only want to know about the students who have failed their year and may need to repeat, we also want to know which students are most likely to consider withdrawing or seeking to transfer or reapply in response. In anticipating such supports and interventions in advance the service will develop new systems to reflect these strategies. Doing this will require a reassessment not only of the supports provided by the Disability Service, but also of all the other services in the university. Improved tracking of student progress through a self assessment system to alert students to seek support and new academic skills modules will also be implemented.

The Disability Service is seeking to improve data management in the area of student progression and set standards which can be fairly compared to the general student population in TCD and as a benchmark with other Higher Education Institutions.

### Conclusion

In the past we did things differently; for the most part reacting to the needs and demands of students with disabilities. While this provided a much needed service and supported increasing numbers of students through their 3<sup>rd</sup> level education, it was limited in several ways. It left responsibility for the pre-entry and transition of students with disabilities into higher education to the supplementary admissions route (now DARE, Disability Access Route to Education), it contained difficulties 'within' the Disability Service so that the wider College didn't always become as aware of the needs of students with disabilities as was required; and finally, it took little active responsibility in supporting students in the transition out of higher education and into employment. While these limitations are outward signs of a service reacting (successfully) to the growing needs of an increasing number of students with disabilities, it has become apparent in recent years that a more considered and evidence based approach is required. This must be done, not only to continue as before to provide supports to students with disabilities, but also to develop new initiatives in line with three phases of transition. These phases are not single events that happen on a particular day or only last a few weeks; transition is a constant process and involves responding to the needs of students at every step in their journey.

### Author note

Declan Reilly is a Disability Officer and a Ph D candidate in Trinity College Dublin researching the impact of inclusive policies and supports on the entry, progression and completion rates of students with disabilities.





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# The role of mathematics support in managing the transition to third level at University College Dublin

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### Abstract

The Mathematics Support Centre (MSC) in University College Dublin (UCD) offers mathematics support, usually on a one-to-one or small-group basis, to all undergraduate students in the university. The service is free of charge to the student and operates mainly on a drop-in basis. In this paper we will present an analysis of data collected on the MSC from two sources during the academic year 2009-10. The first set of data contains information on each of the 3,508 visits to the centre in 2009-10, while the second set of data consists of 185 evaluations forms completed by visitors to the MSC in the same year. We discuss our data collection methods and present a summary of the results. Using qualitative responses gathered we then examine the specific role that the centre has to play in managing the transition of students to third level mathematics.

### Introduction

The Mathematics Support Centre in University College Dublin was established by the Department of Mathematics in February 2004 with the aid of Higher Education Authority (HEA) funding. The main aim in setting it up was to provide support to first year students in making the transition from second-level to third-level mathematics. More specifically, the department believed the MSC had a role to play in supporting first-year students enrolled in "service" mathematics courses, that is, students pursuing non-mathematics degree programmes but for whom mathematics was a compulsory first-year course, for example, students in Agricultural Science, Commerce, Engineering and Science.

Around the time the UCD MSC opened there were fledgling mathematics support centres in a number of third-level institutions in Ireland. The Mathematics Learning Centre in the University of Limerick was the first of its kind in Ireland when it opened in 2001, and proved to be an advocate, and a catalyst, for the setting up of similar centres in other Irish institutions. While the concept of the mathematics support centre was still quite new in this country, there were already a number of such centres in the United Kingdom (UK). Croft, Duncan and Halpin (2001) report that in response to a questionaire sent to UK universities around this time to determine the extent of mathematics support centre provision, 46 out of the 95 Higher Institutes that responded, said they had a

mathematics support centre in their institution. Many institutions modelled their centres on those in the UK and the publication by Lawson, Croft and Halpin (2003) acted as a handbook on best practice in running a centre of this kind. The number of centres providing mathematics support in third level institutions in Ireland grew steadily over the next few years as the audit of Irish mathematics support centres by Gill, Johnson and O'Donoghue (2008) illustrates. For an excellent survey article on the setting-up, growth, expansion and evaluation of mathematics support centres in Ireland and the UK we refer the reader to the recent paper of Gill, Mac an Bhaird and Ní Fhloinn (2010).





After opening in 2004, the UCD MSC grew steadily but over the past four years it has undergone quite a dramatic expansion. Today the centre offers mathematics support to any student from any level and any programme in UCD. It does this primarily in the form of one-to-one or small group tuition, provided free of charge on a drop-in basis. It also offers very popular "Hot Topic" sessions to larger groups of students interested in revising a particular topic. The centre is located in a specially dedicated room, furnished to facilitate the provision of support of this nature. It is staffed by a full-time manager and part-time postgraduate tutors. The MSC sees its primary function as enabling students to gain confidence in mathematics and ultimately take control of their own learning and consistently makes it very clear that it is not a "grinds centre".

Perhaps a key factor in its growth was the targeted publicity drive instigated by the manager in the academic year 2007-2008. That year there were 1,440 visits to the centre – more than double the number of the previous year. By the academic year 2009-2010, the number of visits had grown to 3,508, and a preliminary analysis of this year's figures suggests that there were 4,293 visits. While these figures suggest that there is demand for this type of mathematics support, in these financially challenging times, we need to engage in a more detailed evaluation of the centre if we are to justify our existence from year to year. Data collection and analysis is extremely important and for that reason UCD MSC not only collects student evaluations at the end of each semester, it also collects and records information on each visit to the centre. In this paper we will discuss the data collection methods employed in the academic year 2009-10, and present a brief summary of the data. (Full details can be found in the Annual Report of UCD Mathematics Support Centre 2009/2010 which is available on request.) We will then focus on the data collected specifically on first year student

visits and use this to discuss the role that mathematics support of this nature has to play in assisting students in making the transition to third-level mathematics.

### **Data Collection**

In the first semester of 2009-10, each time a student visited the MSC, he or she filled out an attendance sheet recording his or her name, student number, programme and module for which the mathematics help was being sought. At the end of the visit, the tutor who assisted the student would record his or her own name, the time the student arrived and left, and details of the topic on which help was sought. This was then inputted into a database. During the second semester a log-in log-out system, developed by the manager Ms Nuala Curley and Dr Brendan Quigley from the UCD School of Mathematical Sciences, was piloted. Using this system, the student and tutor information was recorded directly onto a database. This proved to be an extremely efficient way to record the data and the system was furthered developed in 2010-2011.

To evaluate the quality of service of the MSC, an evaluation form was available on-line and all visitors to the centre in the first and second semesters were emailed in December 2009 and May 2010 respectively, and encouraged to complete the form. The evaluation form aimed to elicit the student's views on how they heard about the MSC and why they first decided to visit. It also asked the student to rate, using a Likert scale, various aspects of the centre, as well as rate the staff of the MSC under a number of headings. Finally the student was asked if he or she would recommend the centre to a friend and invited to describe his or her experience of using the MSC in his or her own words.





### **Review of Results**

As mentioned above, 3,508 visits to the MSC were recorded in 2009-10. On analysing the data recorded from each visit, it was found average length of a visit to the centre was just over 71 minutes. The median number of visits by a student was two, and the number of visits by any one student ranged from 1 to 44. Stage 1 students were responsible for 73% of all visits, with 20% of visits being made by Stage 2 students. The remainder was made up of visits from Access (3%), Stage 3 (3%), and Stage 4 (1%) students. As one might expect, the number of visits was low at the start of each semester, but increased steadily from weeks 4 and 5 onwards.

An analysis of the data collected from the end-of-semester evaluation forms was also undertaken. In total, 185 students completed the evaluation form. Of these, 39% said they had taken Higher Level Leaving Certificate Mathematics, 49% had taken Ordinary Level, and the remainder of 12% had taken Mathematics to GCSE level or had some other qualification.

When asked to choose from a list the way in which they had learned about the MSC, 42% indicated that they had heard about it from their lecturers in class. This figure suggests that if lecturers see the MSC as complementary to their work and are willing to inform their students about the service, it can have a positive impact in encouraging students to attend. In addition, 29% of respondents said they had heard about it from a friend. This percentage was a considerable increase on the previous year's, which was 16%. We believe that this illustrates that as a support centre becomes embedded in an institution and students have a positive experience in it, word-of-mouth can be a very effective way to encourage those in need to avail of the service. On this note, we were delighted that 97% of respondents said they would recommend the centre to a friend.

In response to the question of why they first availed of the service, 40% indicated that they needed help in a particular area of mathematics; 18% said that attendance was motivated by an assignment or homework that had to be completed; 15% attended because they felt their mathematical background was weak; and, 14% indicated that it had been some time since they studied mathematics. The remainder cited reasons such as having missed lectures due to illness or snow.

The respondents were asked to rate various aspects of the MSC using a five-point Likert scale. Very briefly, 84% either agreed or strongly agreed that the MSC had a welcoming atmosphere, and 74% either agreed or strongly agreed that it was relaxed place in which to study. In terms of opening hours, 62% either agreed or strongly agreed that the MSC had suitable opening hours. The centre opens full days Monday to Thursday and a half-day on Friday, with late opening on a Wednesday. There seems to be demand for it to open late in the evenings, particularly from Science and Engineering students who can have quite full timetables due to the significant amount of laboratory work in their programmes, and the manager is looking into how the MSC can do this subject to the financial constraints.

Students' opinions on the staff of the MSC were also elicited on the evaluation form, again using a five-point Likert scale. The percentage of students who either agreed or strongly agreed that the staff of the centre are friendly and approachable; have good teaching abilities; have a good knowledge of mathematics; help you cope better; and, motivate you to study were 86%; 86%; 87%; 85%; and, 65% respectively. We feel





these responses were extremely positive and suggest that it is down to the fact that we interview all potential tutors and only hire those who can demonstrate that they have the ability to teach. Most of our tutors are also senior postgraduate students enrolled on PhD programmes in an area of mathematics or statistics.

The analysis of the quantitative data on student visits and from the evaluation forms (and summarised above) provides us with a firm basis on which to plan for the future in the MSC. It also enables us to present an annual quality review of our services to management in UCD, and to be accountable for our funding. However, on a personal level what we find most interesting of all are the qualitative responses given by students on the evaluation form. Through these the real "student voice" can be heard. Of the 185 students who completed the evaluation form in 2009-10, at least 95% wrote additional comments relating to the MSC. On the whole these comments were very positive and provide us with additional insight into students' opinions of the MSC under a range of broad categories such as satisfaction with the high standard of tutoring and with the friendly and supportive tutors; the usefulness of the Hot Topics sessions; and, how the MSC encouraged independent learning, motivated students to study, and helped increase student confidence in mathematics. Criticisms of the centre generally related to the size of the room (too small), the opening hours (not open enough), and the fact that there could have been more tutors. The last two are resource issues and in relation to the size of the room, it is interesting to note that in 2009-10 it had been doubled in size from the previous year.

In the remainder of the paper we will discuss the insight that some of these comments provide us in relation to how the MSC supports first year students in making the transition to third level.

### **Discussion of Results – Transition to Third Level**

Broadly speaking, we feel a first year visitor to the UCD MSC will belong to one of three categories. The first category of student we see is the student taking a "service" mathematics course. As explained above, it was for these type of students that the MSC was initially set-up. These may be students enrolled on programmes such Agriculture, Commerce, Computer Science, Engineering and Science – all of which require the student to take at least one core mathematics module at Stage 1. Apart from Engineering, these programmes do not have a requirement that the student has taken mathematics at the higher level for the Leaving Certificate Examination (or equivalent). In addition, students on some of these programmes may find themselves in a mathematics lecture with 300 others. It is not surprising that a student who struggled with mathematics at school may experience great anxiety at the thought of learning mathematics in such an environment. The MSC allows students like this the opportunity to avail of one-to-one help and to build confidence throughout the semester.

It was a huge help to me as I did not do higher level maths for the leaving I found myself confused with some of the concepts. MSC helped me out a lot.

I could not have been happier with the help I got in the msc, it really helped me understand maths when I thought I'd never understand it!! One 2 one is so much easier to understand and ask questions than in lectures!

The second category of student we see is one where the student is enrolled on a programme which has a large component of mathematics and requires students to have





achieved a C3 or higher in Leaving Certificate mathematics (or equivalent), for example, programmes in Actuarial Science, Economics and Finance, Mathematical Science, and Theoretical Physics. As outlined above, 39% of all visits to the MSC in 2009-2010 were made by students who had taken higher level mathematics. While many of these students may not require help in basic mathematics, the MSC can offer them the opportunity to improve their understanding of more challenging topics.

I found the MSC very helpful on areas where I got stuck in webwork and was a valuable asset to my studies, it undoubtedly helped me grasp top marks in the class by explaining some fundamental concepts of the formulas which were used on the course.

The third category of student consists of a "new" type of visitor to the centre - the student who is enrolled on a programme where mathematics is not even a core module, but where he or she meets or needs mathematics in the context of

some other module. This category of student emerged for the first time from the 2009-10 data when we saw that students from 57 of the 81 undergraduate programmes offered by UCD had visited the MSC. For example, there were visits from students from programmes in Architecture, Geography, Health Sciences, Nursing, Medicine, Radiography, and Veterinary Nursing.

Within these three broad categories of student, there are both "traditional" and "nontraditional" students. While these titles are perhaps not very helpful, one might think of a "traditional" student as being 17-19 years old and fresh into university from the Irish Leaving Certificate. In the "non-traditional" cohort, one might think of mature students, international students and/or students who have not taken the Irish Leaving Certificate, and students from socio-economically disadvantaged backgrounds.

In relation to mature students, the MSC can prove to be a tremendous support. Some may not have studied mathematics in quite some time and may have forgotten many of the basics, and many mature students can experience a lack of confidence for this reason. The one-to-one support offered by the centre is ideal for these students, especially in relation to teaching or reminding them of some basic mathematics. The following are examples of comments from mature students:

One to one help was essential for me to understand basic maths that I have either never understood or completely forgotten. I think I would have struggled to pass the subject in access science without this help. I needed to practice maths alot and this was possible because of the support.

I found the one on one tuition extremely helpful, the tutors were very patient and understanding. The MSC is an invaluable resource for the mature student.

Each year, a number of students from Northern Ireland enroll in programmes in UCD. While these students are usually of a very high calibre, they may have studied mathematics to GCSE level only. If mathematics is then a core module of their first year programme, they may need additional mathematics support to bridge-the-gap. The following is a comment from such a student:

I felt like I was completely thrown in at the deep end in my 3 compulsory maths classes, as most people already knew what integration, differentiation and matrices were. It took a lot of patient explanation from staff at the maths support centre for me to get basic





stuff, before I could move on to understanding my lectures. I think (as maths is not compulsory for A levels) that any northern student who had not studied maths would be lost without the maths support centre...

A similar problem may exist for international students whose mathematical background might not match exactly to that of a "traditional" student. For example:

I am international student and it is my first experience studying abroad. And of course it was difficult to understand all material that was given on the lectures, especially math. So my friend suggested me to go to the MSC. Initially, I was shy to ask questions, but tutors were so friendly, always ready to help and I decided to ask them all that I did not understand. I spent all my free time in MSC solving problems and proving theorems. Now, I am more confident in math and statistics. Thank you MSC!

### Conclusions

While the UCD MSC was initially set-up to support first year "service" students in making the transition to third level, it clear from our analysis of student visits to the MSC in 2009-10 and also student evaluations from the same year, that the MSC now offers "mathematics support for all". Undergraduate students from service mathematics courses, mathematics programmes, and programmes that do not even require students to take a core mathematics module, all have availed of the services of the MSC in 2009-10.

Students from all levels visited the centre in 2009-10, but visits from first year students accounted for 73% of all visits. Again it is clear from our data that the MSC has a valuable role in supporting these students in the mathematical transition to third level, and specifically in supporting mature students and students who have not taken the Irish Leaving Certificate Examination. While we do not claim that the presence of the MSC has impacted positively on retention in UCD, we believe that the availability of such support can only be a good thing in

tackling retention issues. We leave the reader with the following comment from a student:

When there are people to help you it is great, I have no doubt that without it I would have dropped out by now.

### **Biographical Information**

Nuala Curley is the manager of the UCD Mathematics Support Centre. She took up the position four years ago after completing an MSc in Mathematics in UCD. Nuala also has a H.Dip. in Education and has many years experience in teaching mathematics. Her current research interest is in developing a student registration system for use in mathematics support centres.

Maria Meehan is a senior lecturer in mathematics in the UCD School of Mathematical Sciences. She is Director of the UCD MSC and her research interests are in mathematics education at the third level.





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# A review of the Peer Assisted Learning Programme in UCD Access Centre

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### Abstract

The transition from second-level into third-level is a trying time for learners. Apart from learning how to manage a new environment, managing autonomous learning can be one of the greatest challenges for the incoming learner. For a learner part of knowing how to become an effective learner at third-level is knowing who to ask for help and guidance when a problem has surfaced. International literature has supported the notion that often learners, especially first-year learners, do not feel comfortable enough to approach a lecturer to ask for help and research findings suggest that typically learners will either not seek help with an academic issue or will ask friends and/or family for their advice. One approach used to support learners in first year and to help them to manage their overall experience is to offer a Peer Assisted Learning programme. The benefits of this type of intervention have been reported to positively impact learners both socially and academically in first year. There is also a body of literature which suggests that the academic experience of the Peer Leader can also be positively impacted. This paper discusses a number of findings deriving from a review of learners' and leaders' perceptions of the Peer Assisted Learning pilot being run in UCD by UCD Access Centre for a random selection of New ERA learners.

### **Introduction: Transitions**

In Irish education there is significant attention given to learner transitions as students move from primary to second-level, from the junior cycle to senior cycle, from second to third-level and out of third-level into the work place. The issues centre on the types of skills that learners possess at each stage of and whether they have sufficient competencies both socially and academically to manage the transitions effectively.

Many learners can face both academic and socio-cultural challenges on entering third level. (e.g., see Clark, 2005, and Morosanu, Handley and O'Donovan, 2010). The literature describes various approaches that have been used in an effort to enhance learner experience. Some have been implemented to prevent learner withdrawal (e.g., Beggs, 2003), while others intend to help learners to effectively manage the transition (.e.g. Selden, 2005).

Peer Assisted Learning (PAL) is one approach that has been developed to address learner support needs at the social and the academic level. This paper will outline the main ideas behind PAL and will take a more in-depth view of PAL being used by UCD Access Centre: New ERA.





### Literature Review

Peer assisted learning has been an approach used in higher education institutions around the world for decades (e.g., Anderson, Boud and Sampson, 1996; Peterfrund et al., 2008). Boud, Cohen and Sampson (1999) suggested that peer learning can be defined as 'the use of teaching and learning strategies in which learners learn with and from each other without the immediate intervention of a teacher' (p. 413). The premise of PAL is based in a constructivist framework which educationalists agree can be more beneficial to learner learning at third level. Roscoe and Chi (2007) explain that in this framework PAL operates in such away that the tutors/leaders act in a facilitatory capacity and guide the learner through learning rather than operating in a traditionalist environment where they teach the learner. In this sense the learning environment should provide the context where the tutor/leader actively guides and the learner actively learns (Duron, Limbach and Waugh, 2006).

Currently there are different models of PAL in existence. Gabrielle and Montecinos (2007, p. 152) outline models such as 'cooperative learning, collaborative learning, and peer and cross-age tutoring' as coming under the umbrella term PAL. Roscoe and Chi (2007) also speak of the term Supplemental Instruction when referring to one form of PAL. These researchers use this term specifically in reference to the situation where a senior tutor/leader takes a group of junior learners in order to facilitate learning. This model was adapted recently to allow for the tutor/leader to belong to the same age/class bracket as the learner (see Ning, Downing, 2010). Despite the approach to peer learning being employed reports in the literature are that; active learning must be allowed to occur and where possible feedback on learning and progress should be supplied.

'Most researchers speculate that peer learning is effective because it fosters constructive learner interaction and active involvement' Gabriele and Montecinos (2007, p. 153). However, when giving some though to why PAL should be used as a technique to enhance learner learning research suggest that while as a concept or an approach there are clear identifiable benefits, 'the exact mechanisms responsible for the benefits of peer learning are complex and not well understood' (ibid, p. 153). Given the point made by Gabriele and Montecinos, the overall benefits as highlighted in the literature will be presented. It can be argued that range of reported benefits is quite extensive. Hammond, Bithell, Jones and Bidgood (2010) summarise this point by stating;

...these include advantages for the institution and teaching team, such as improved retention (Congos and Schoeps, 1998) and improved course grades (Bidgood, 1994; Parkinson, 2004). For the learner involved benefits include adjusting to university life; improving study skills acquiring a clear view of the course expectations and an

increased understanding of the subject matter of the course (Capstick et al., 2004). Others have identified more benefits to peer learning in the areas such as critical reading (Finlay and Faulkener, 2005)...

Recently there has also been research conducted into the benefits of PAL for the tutor/leader. Roscoe and Chi (2007) have suggested that much evidence exists to support the notion that in the case of same-age tutoring (defined as tutors and tutees are similar in age or grade) more so than in the case of cross-age tutoring, there have been increases in tutor learning as a result of being involved as a tutor.





The guidelines for best practice presented in the literature differ depending on the specific outcome to be achieved. However in looking across the literature research has suggested that to maximise the potential of PAL for the learner the learning environment should:

- Be constructivist
- Be positive
- Have feedback available
- Be clear on what the aim of the peer learning is to be
- Maths and science seem to reap the greatest type of learning
- Be tutored by same-age leader/tutor in higher education
- Be active
- Be asked appropriate questions to be given the opportunity to think
- Be set up to allow the tutor/leader and the learner to design the structure of each session
- Promote responsibility for learners own learning and progress
- Train learners in how to cooperate effectively

### The PAL Initiative Taken by New ERA

UCD Access Centre: New ERA was established in the 1990s to address how to improve access to higher education for individuals from disadvantaged communities. In very general terms, students who are supported by New ERA typically have backgrounds that are 'affected by long-term unemployment, by low family income and/or little or no tradition of progression to third level education'. (Denny et al, 2009, p. 5).

On being accepted into university, New ERA provides a New ERA residential Orientation week, which acts as a preparatory measure to ensure that these students arrive to UCD familiar with the logistics, knowing where to go for help and knowing a face in their classes. Throughout the year they benefit from a Peer Mentor Programme, student led social events, personal guidance and support, additional tuition as well as financial support. The introduction of this Peer Assisted Learning initiative in September 2010 was taken to address a recommendation made by a review committee (see Denny et al, 2009) which stated that additional supports should be put in place that are designed to support the learning and retention of direct entry students in their first year in UCD. As such, New ERA began to deliver a Peer Assisted Learning Programme to stage 1 New ERA students registered to Arts, Social Science and Science degree programmes.

The type of Peer Assisted Learning being employed is based on a model that used student-led study and revision sessions. While the administrative and co-ordination elements were managed by the New ERA Student Adviser, the weekly PAL sessions were organised, planned and led by 'Learning Leaders' who are students that had progressed to higher stages in the university having successfully completed modules in the subject area they are 'leading' in. To further support the leader in content preparation the contact details of academics in related subject areas were provided. However, this offer of academic support did not prove to be widely availed of by the leaders.





### **Review of PAL**

The Peer Assisted Learning Programme was piloted by New ERA from September 2010. A review was undertaken at the end of the first semester of the pilot, which was the end of December 2010 (Egan, A. 2011). This review had a number of aims to be addressed;

1. To evaluate both learners' and leaders levels of satisfaction with the programme to date

2. To establish the strengths and the challenges of the programme from the learners perspective

3. To ascertain the types of effects that the programme was having on learners experience of their first year university Arts programme

4. To gather recommendations from learners and leaders on improvements that could be made to the programme

The review used a number of research methods including literature review; focus groups with both learners and learning leaders; feedback from relevant New ERA staff.

#### Results

### Learner Benefits

With respect to the aims for PAL, there appeared to be significant consensus from learners that they understood the aim of the programme was concerned with the academic experience of the learner.

To make sure we are getting on alright. Like you know if you needed help they would try and help us anyway they could, but you know just kind of a check-in type thing...academically (PAL Learner)

Furthermore, learners describe the types of support that the programme offered to them both academically and socially. The table below displays learners' responses to this question.







## Table 1: Learners' reports of the type of support offered by theprogramme

Туре	Response	
Academic	<ul> <li>Somewhere to go when you have a few questions at the back of your head</li> <li>Guides you along with assignments</li> <li>Easier to talk to your peer leader than to your lecturers or somebody who is doing your tutorial, because they are a little scary and you wouldn't talk to them</li> <li>Easier to understand academic issues when explained by peer leader</li> <li>If I needed help with my assignments I would just send it to her and she would tell me what was wrong and I could change it before the deadline</li> </ul>	
Social	<ul> <li>Come to college and know that you are going to see a friendly face</li> </ul>	

As can be seen from the table learners provided more responses about the academic offerings of the Peer Assisted Learning programme than they did on the social offerings. Indeed during a focus group one learner stated "well it hasn't really socially because it's about learning and like how you can get along so..." It is worth noting that when thinking about the social support offered by the Peer Assisted Learning programme, there was some evidence that learners were trying to separate out the positive social experiences they were having from being part of the New ERA programme which begs the question; would there be any more social benefits to the PAL programme if learners did not know each other or belong to a learner group?

Learners report the experience of having a peer (albeit slightly older in academic years) as a positive learning experience. They felt that the leaders saw things from their perspective

...they saw our side whereas if you go up and ask the tutors, 'sure you should be able to do it kind of way'. Like lecturers are just like 'oh you don't know how to reference the Harvard style...ah sure. (PAL Learner)

And also that leaders were helpful in finding and offering solutions

...like they have been there before, they have been in the same situations; they know how to help us (PAL Learner)

Learners offered information on academic skills they felt they gained or enhanced through the PAL. The responses offered by the learners are listed below;





- How to write an essay
- What to do in the exams
- How to do critical analysis
- How to manage MCQ assessments
- Referencing

There was a more mixed response from learners to on whether or not PAL helped them focus on their studies. However there is no suggestion that PAL was unhelpful or that it hindered their progress.

..because we have so many contact hours...with so much to do outside and kind of having the group and speaking French for that hour and going through 'cos our leader, peer leader that we had was like 'if you don't mind or if you want I will do it through French but yet a bit through English if you get a bit confused and having that hour kind of like kicked you up the ass because it was at the start of the week and like it was much easier to like even if I went home I would take a break and then go hmm... might do some French now like it kind of gave you that kind of like incentive to do work for that subject in a way (PAL Learner)

I don't think I had any real experience, so I just mean I don't think I learned to focus more or less I think I was just kind of, I was indifferent (PAL Learner)

Learners described what they considered the strengths of the programme to be. The responses are presented in the table below

### Table 2: Learners perceived strengths of the programme

•	Helped you to come out of your shell and to be confident enough to
	ask for help when you need it
•	When you were in trouble (e.g., with essays) you had the
	understanding that you could ask for help and that help would be given
•	They act like really good friends – really good friends that you can ask
	questions without feeling you are being judged

It is like having a smart friend that you can go to

It is worth noting how they are marrying the academic with the social as they describe the strengths of the programme. In other words, the friendliness and approachability of the leaders helps the learners to progress academically and to find solutions to their academic challenges.

Overall, learners reported a high level of satisfaction with the programme, rating it between 7 and 8 out of 10. Learners suggested that that more module specific content (as opposed to subject area) would be an improvement as there is not enough time in one hour to cover content from more than one module.





### **Benefits for Leaders**

The review found that Learning Leaders were motivated to participate through an interest in facilitating learning and imparting the wisdom they had gained from their experiences to the learners. They identify a range of benefits to their participation:

- Increased personal confidence and self-esteem
- Increased organisational skills
- Increased learning and planning skills (taking own advice on best practice)
- Increased time-management skills
- Increased inter-personal skills

It is worth noting that the benefits they are describing reflect a range of skills that can transcend the academic environment and are currently being sought in the work-place.

Leaders consider the main strengths of the programme to be academic support for learners, while for themselves they describe a key strength as the potential for developing friendships with the learners and being approachable within the university.

While leaders generally were very positive about PAL, they did identify a number of important challenges:

- Timing finding a time to run a session that suits both the leader and the learner
- Attendance difficulty in gaining commitment from all learners to attend regularly
- Responsibility more work to be done on top of own work
- Increased stress unsure as to the accuracy of the course related information being imparted due to changes at course level from one year to the next
- Not having access to first year course work
- Boundary identification fear of stepping from facilitator into course leader role (this could be overcome through increased input from the School)

Despite these challenges, leaders describe some positive responses from learners to the programme, although it some cases it took some time.

I got a positive reaction overall, like on a number of occasions a couple of them approached me outside the class for help with a particular essay, so I think they were pretty happy with the extra help, so overall positive, like a couple of them missed a couple of classes, but overall I think was pretty positive (PAL Leader)

..it took a while for my group to get into the swing of it because the first couple of weeks attendance was kind of sporadic and then like two people left the group





and the three that were remaining they kind of got into it and they came every single week then. They got on well, they came every week and I don't know if they were particularly enthusiastic about the subject but they came anyway for the support (PAL Leader)

A key element of PAL is that learning leaders are facilitating learners and not teaching or giving grinds. The review found that leaders held various perceptions and perspectives about their roles as teacher vs. facilitator. In one case the leader commented;

I think there is a fine line between guidance and teaching and I think like say when your learners miss a tutorial they kind of want you to go back over it and remember what you did...but I think there is a very thin line between teaching sometimes you do feel like you have to teach but because we are only told to be going as a mentor not to teach you kind of have to take a step back and go I can't really go that very deep because that is me doing too much (PAL Leader)

It can be seen from this comment that the leader is confused about how much work constitutes teaching and steps away from facilitation. Another leader commented in this 'line' also, but made their comment from a different perspective. Specifically, this leader stated;

...but I was trying to take a step back from that because I had my own work and I'm not going to do someone else's and do you know, I think they expected us to teach rather than just give advice and that side of things its so hard to step out of that position (PAL Leader)

Leaders describe the main learning for them as providing an opportunity for revision of own first-year course; the opportunity to pass on study, revision and general 'coping in University' techniques; gaining insights into teaching and being in charge of helping someone to learn; as well as insights into learner needs and range of needs that can exist, and the importance of including everyone in group.

Leaders suggest a number of areas where New ERA can enhance the programme:

- A greater level of academic support and involvement
- Strategies to improve attendance
- Enhanced training for leaders





### Conclusions

In very general terms, it became evident that the learners saw the academic benefits of the PAL programme over the social benefits. To improve the programme, these learners suggest that more subjects be offered that cater to specific modules. Regarding the leaders, it emerged that they were able to identify learning and competency development opportunities for the learners as well as for themselves. Some of the key recommendations suggested by this group included more focused training, rescheduling the timing of the sessions and the possibility of having learners select into the programme rather than prescribing the programme to them.

It has been stated in the literature (e.g., Yorke, 2000) that poor social networks in third level can be a contributing factor to learners having a poor experience at third level. PAL programmes are often used as a both a social and academic intervention yet for these learners the social element was minimal. However, in this case, the PAL programme was set up to make better use of the already positive social experience many New ERA students have to enhance their academic experience.

Finally there are clear suggestions made based in research on the type of training that should be given to leaders to ensure that they don't overstep the boundary between facilitating learning and teaching. However, there is no agreement currently on whether academics should be involved in programme session design or not. As this is still an area of debate, New ERA should undertake a review of training and academic involvement to identify available models and best practice in line with the types of leaders and learners that will be involved in the programme in UCD.

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### Making A Successful Transition During the First Year of College: Does Emotional Intelligence Matter?

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#### Abstract

The transition from secondary school to university is a stressful event for most young adults. Such challenges may include learning to live away from home for the first time, developing new friendships and keeping up with the demands of a new academic environment. A failure to master these types of tasks appears to be a common reason for students withdrawing from third level education. This paper presented original research on the role of emotional intelligence in first year student success among a large sample of first year DIT students. The short form of the Emotional Quotient Inventory (EQ-i) was completed by 1072 first year students early in their academic year and the students' cumulative GPA for the year was used to identify academically successful and academically unsuccessful students. Academically successful students had significantly higher levels of various emotional intelligence dimensions. Academic progression was tracked over a four year period and a total of 173 students were reassessed using the EQ-i Short during the final year of their 4 year degree. Results are discussed in the context of the importance of other DIT research on coping with emotional distress and, along with the role of academic interventions and supportive student counselling during the transition from secondary school to university.

#### Introduction

'I endorse the focus on providing a better first year experience with a stronger emphasis on general academic induction and preparation for further study... our students will be better able to make those difficult transitions from second level to third level and onwards to their working lives'

(Mr Ruari Quinn, Minster for Education and Skills, 2011)

A volume of literature (reviewed by Tinto, 1993) already exists on academic success in a third level context. Much of the early research on academic success in post-secondary education focused specifically on the impact of previous school performance and/or standardised measures of cognitive abilities. Research indicates that cognitive ability alone is limited in predicting academic success in postsecondary education (Parker et al, 2004). Other variables including full- or part-time attendance, employment status, being a member of an ethnic minority, family obligations, distance from home town, financial concerns, and gender, have attracted considerable research interest also (Smith, 1982). Keup & Stolzenberg (2004) found that more than one third of their student sample reported feeling `frequently overwhelmed by all they had to do'; more than one third also felt frequently or occasionally lonely or homesick, worried about meeting new people, and a need to break away from their family in order to succeed. They also indicated that





students underwent significant changes in their self-concept over the first year of college.

In recent years there has been a strong interest in the concept of emotional intelligence and its role as a predictive variable in academic success. Emotional intelligence or EQ has been defined as a multi-factorial array of emotional and social competencies that determine how effectively we relate with others and ourselves and how we cope with environmental demands and pressures (Bar-On, 2000). While a number of distinct and overlapping conceptual models have been proposed for emotional intelligence (Bar-On & Parker, 2000), the most popular models share a common core of basic concepts that refer to the ability to recognize and regulate emotions in ourselves and in others. These abilities include Self-Awareness, Self-Management, Social Awareness, and Social Skills (Newman, 2008).

International research studies that have investigated the relationship between academic success and social and emotional competencies have produced contradictory findings, however. Parker et al., (2004) found that academic success in the first year of college among 372 first year students in a Canadian university was strongly associated with several dimensions of emotional intelligence and that these dimensions of emotional intelligence were better predictors of first year university grade point average (GPA) than high school GPA. In another study, Parker, Duffy et al., (2005) assessed 1426 first-year students attending four different universities using the short form of the Emotional Quotient Inventory (EQ-i) in the first week of classes (September). At the end of the academic year (May), the students' cumulative GPA for the year was used to identify two groups of students: academically successful (GPA of 3.0 or better; n = 590) and academically unsuccessful (GPA of less than 2.0; n = 289) students. They again found that academically successful students had significantly higher levels of several different emotional and social competencies, which suggests that emotional intelligence plays an important role in the successful transition from high school to university. However, a study by Newsome, Day & Catano (2000) that examined the relationship between emotional intelligence, cognitive ability, personality and academic achievement, found that cognitive ability and personality (in terms of extraversion and self control) were significantly associated with academic achievement. However, none of the EQ factors (as measured by the EQ-i:S), or the total EQ-i score, was significantly related to academic achievement. Barchard (2003) examined the predictive validity of emotional intelligence with the predictive validity of traditional cognitive abilities and the Big Five personality dimensions of personality in a sample of undergraduate psychology students using yearend grades as the criterion. The study found that only some measures of emotional intelligence predicted academic success and that none of these measures showed incremental predictive validity for academic success over and above cognitive and personality variables.

#### **Current Study**

The aims of the current study were as follows:

1. Determine current levels of social and emotional competency in first year wholetime undergraduate students (as measured by the EQi:Short Post Secondary).





2. Examine the variables, including gender, choice of academic discipline, leaving certificate performance and end of year academic results that account for differences in social and emotional competency in first year whole-time undergraduate students.

3. Determine the value of the EQ-i:Short Post Secondary in predicting academic success from emotional intelligence variables in the given sample.

4. Examine changes if any in emotional intelligence levels in a sample of students over a four year period.

#### Sample

A total of 1075 first year students, drawn from all DIT faculties, agreed to take part in the research. From the end of September 2004 through the first semester, students from over 70 first year whole time undergraduate courses across all of DIT's 6 Faculties completed the EQ-i:S. In all, 36% of the total registered first year undergraduate whole-time population was represented in the sample. There were 200 from the Faculty of Applied Arts; 105 from Built Environment; 218 from Business, 237 from Engineering; 157 from Science and 158 from Tourism & Food. The male/female gender breakdown was 594 males and 481 females. Participating students were aged between 17 years and 39 years (Mean: 18.85; Mode: 18; S.D.: 1.691). EQ-i:S results were correlated with end of year results, leaving certificate points, gender and course choice. Particular attention was paid to those students (aged 17-20) who had completed their Leaving certificate within a two year period in order to examine the performance of the traditional post-secondary student. Four years later a sample of a subset of the sample (N=171) who were then in their final year of studies were reassessed using the EQ-i:S and their mean scores were compared to their scores in their freshman year.

#### Results

Total EQ scores and subscales scores (Intrapersonal, Interpersonal, Stress Management, Adaptability and General Mood) were examined for the entire sample of 17-20 year old students (n = 910) who completed VALID profiles. Normative data for of the EQ-i:S (EQ Total Score and each of the 5 Composite Scales, based on a North American sample of 7500 post secondary students) were used for comparison. Standardised normative data for the EQ-i:S render Means of 100 T-Score points and Standard Deviations of 15 for Total EQ and each composite scale, indicating that 85% of the normative population score between 85 and 115 t-score points on the EQ-i:S. The total EQ score for the Irish sample was 95. The highest mean score was achieved in Interpersonal EQ (100.6); the lowest in Stress Management (93.4).

#### Differences in EQ between males and females

Statistical analyses (T-tests) were conducted to determine if there were significant differences in EQ scores between males and females. Overall, males scored significantly higher (p<.05) in Intrapersonal Competencies (e.g. Self Regard, Assertiveness, Independence) and General Mood (p<.01) while females scored significantly higher





(p<.01) in Interpersonal Skills (e.g. Empathy, Social Responsibility, Interpersonal Relationships). Males score higher than females in Total EQ in the Faculty of Built Environment in that there was a difference of 8.3 points (Sig. 2 tailed = .005). Males in Built Environment also scored higher than females on General Mood (mean difference = 12.02; Sig. 2-tailed = .000) and on Stress Management (mean difference = 8.61; Sig. 2-tailed = .021). In the faculty of Business males scored higher than females on Stress Management (mean difference = 4.35; Sig. 2-tailed = .046). Likewise, in the Faculty of Science, males scored higher than females on General Mood (mean difference = 6.49; Sig. 2-tailed = .039).

#### **Differences in EQ between faculties**

A one-way analysis of variance was employed to investigate if there are any differences in EQ scores between the various academic faculties. In a one-way ANOVA, the total variation is partitioned into two components, between Groups and Within Groups. Between Groups represents variation of the group means around the overall mean. Significance values that are less than .05 (<.05) indicate group differences. While there was no difference between the faculties in Total EQ scores, there was in Interpersonal EQ - at least one of the groups differed from the others for this scale (F=22.39; sig. = .000). Post Hoc comparisons were used to determine which of the groups differed from one another. Pairwise comparisons of mean scores for Interpersonal EQ showed significant differences between Engineering students and students from Applied Arts, Business, Science and Tourism & Food.

#### **CAO Points and EQ**

A Pearson Correlation was carried out to determine if there was a relationship between CAO points on entry and EQ scores. There was a significant positive but weak correlation between COA rating and Adaptability ( $r=.078^{**}$ ).

#### CAO Points and Year 1 Grade Point Average

A Pearson Correlation was carried out to determine if there was a relationship between CAO points on entry and Grade Point Average (GPA) scores achieved at the end of first year. There was a significant positive but weak correlation between COA rating and GPA  $(r=.236^{**})$ .

#### Year 1 Grade Point Average and EQ

Differences between EQ scores and students' grade point average (GPA) at the end of Year 1 were also explored. There was also a significant positive but weak correlation between GPA and Adaptability ( $r=.172^{**}$ ). Pearson Correlation also identified a significant positive but weak relationship between GPA and Total EQ ( $r=.092^{**}$ ) and between GPA and Stress Management ( $r=.073^{**}$ ). All Correlations were significant at the 0.01 level (2-tailed).





Furthermore, when students were further categorised into groups according to GPA range (i.e. 0-20%, 20-40%, 40-60%, 60-80%, 80-100%), students who achieved GPA scores of between 40%-60% (Group 1) had higher EQ scores than students in the 60%-80% GPA range (Group 2). There was significant variance in mean scores for Total EQ and Group 1 (m=93.69; SD=13.96) and Group 2 (m=96.23; SD=13.73). When EQ Composite scores (intrapersonal (RA), interpersonal (ER), Stress Management (SM), Adaptability (AD) and General Mood (GM), were analysed there was a significant difference in Adaptability between high achievers and low achievers (see Figure 1.)





#### Changes in EQ scores over time

Independent t-tests were carried out to determine if there were significant variances in means between Time 1 (circa October 2004) and Time 2(circa March 2009) for 171 students who were retested with the EQ-i:S. Statistically significant differences were found for Intrapersonal EQ and for Adaptability (see Figure 2).

*Figure 2: Time 1 (Year 1) v Time 2 (Year 4) scores for EQ-i Scales for 171 final year students* 







Furthermore, when the 4th year Pass/Refer results were analysed, there was no significant variances in the standard scales for Intrapersonal, Interpersonal, Stress Management or General Mood. However, there was a significant variance in the mean scores for the Adaptability (Pass: m=99.37; SD = 14.92) (Refer: m=96.53; SD = 15.95) sig = .008.

#### Discussion

The purpose of this research was to explore social and emotional skills in first year whole-time Irish undergraduate students using the EQi:Short Post Secondary assessment and to evaluate if gender, choice of academic discipline, leaving certificate performance and end of year grades were important variables. We also wished to determine if emotional intelligence levels changed over the four year period that students attended college. A sample of DIT whole time first year students, aged between 17 and 20 was assessed early in their first academic year and again in their final academic year. The Irish sample of first year students seemed to have less skill in managing stress than their American counterparts - a finding that has been also shown in concurrent studies by the DIT Student Counselling Service. Male students scored higher in intrapersonal skills and in managing mood while females were higher in interpersonal skills, in keeping with other EQ-i studies (Baron, 1997). This finding suggests that males tend to feel good about themselves and about what they are doing and that they are confident in expressing their ideas and beliefs. First year female students, on the other hand, are adept at 'people skills'. They tend to be responsible and dependable and understand, interact with and relate to others in a variety of situations. There were no differences observed in overall EQ performance across the range of academic disciplines, although engineering students, with a predominance of male students, scored lower that other faculties in interpersonal skills.

Regarding the value of the EQ-i in predicting student success, it was interesting to note that CAO points or EQ scores were able to predict academic success in the first year of college. This underlines the reality that there are possibly multiple factors involved in student first year success. However, one EQ scale, Adaptability did show usefulness in distinguishing students who were able to adjust to their new environment. When the EQ scores of students who progressed to the second year of their course were compared to the scores of those who were not registered on a second year course there was a significant difference in Adaptability. Differences were noted in the way students reported how they typically approached problems and difficulties. Successful students faced difficulties or hurdles by taking time to get an overview of the situation, collecting as much information as they could. They reported that they would think through possibilities, decide on the best possible way and use a step by approach, in solving problems. Unlike students who did not progress, successful students tended to believe that they can stay on top of tough situations, and rarely daydreamed or engaged in fantasy. However, students who didn't progress were more likely to indicate low self esteem ( 'In the past few years I've accomplished little') and negative expectations ('Before beginning something new, I usually feel that I'll fail'). Thus successful students seemed better able to grasp problems and devise effective solutions and deal with and resolve issues.





#### Recommendations

The findings of this study would suggest that first-year courses need to spend more time and resources helping students with self-organisation, time management, and related academic skills, as well as general skills in maintaining focus and motivation. This is all the more useful given the widespread view that emotional and social skills can be enhanced (Goleman, 1995). Indeed some growth in EQ was evidenced over the four year period of this study. The challenge however, is to develop ways that these skills can be intentionally developed through course input and social learning. Indeed, Schutte and Malouf (2002) found that a focus on emotions and the application of emotional skills provided first-year students with resources that may be helpful in coping with academic and social adjustment challenges.

We recommend the following best practice interventions: Extended induction/orientation process – towards building mastery and confidence; Embedding specific discipline based modules into the first year; Interventions which help students access support (both formally and informally), e.g. peer mentoring, self groups, etc.; Well supported and well developed tutor advisory systems. We highly commend the DIT 'GET SMART!' programme. The Get Smart programme offers a new perspective on teaching and assessment methods which aims to facilitate students in adapting confidently to third-level education, and contributing to the fulfullment of their personal and professional development. It sits laterally across the first semester modules. It draws on the theoretical underpinnings of a skills curriculum and strives to achieve positive results in students' academic learning, employability, professional practice, self-development, information management and social awareness are highlighted throughout.

We also commend the DIT Lead Programme. This module is designed to encourage, promote and support the development of a range of employability skills through student engagement in extra-curricular and co-curricular activities. These activities could involve volunteering, peer mentoring, participation in student societies, clubs and other organisations. The module recognises and awards credit to the important learning that takes place outside the confines of formal academic study. It provide participants with the skills and knowledge to enable them to detail and critically reflect on the ways in which they plan, develop and achieve a range of employability skills through engagement with extra-curricular and co-curricular activities.

#### **Biographies**

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#### ABSTRACT

According to the Institute of International Education, Ireland is consistently ranked in the top ten Study Abroad destinations for US students, not just in Europe, but worldwide. One of the primary reasons is language but there are other factors such as programmes on offer, quality of education, heritage and finance. However, there is increasing competition from non-traditional destinations such as China.

The host academic environment can be considerably different for US students studying abroad. Study Abroad students are accustomed to receiving very high service levels in their home universities, with a huge amount of guidance and a less independent ethos, one that we might consider more appropriate to second level.

There is an expectation, on the part of the student, that everything will be similar to home. The irony, of course, is that the reason that they have chosen to study abroad is to have different learning and living experiences!

Technology is driving the "global village" concept. Skype is a part of everyday life and students remain connected to their home environment, but is it impacting on the study abroad experience?

This paper explores "US Students in Transition" examining the academic experience and the living experience of short term visiting students studying abroad in Ireland, specifically at UCC. The role of Skype is also reviewed.

#### INTRODUCTION

The one common element for all international students is the transition required when moving from the familiar surroundings of their home environment to a new university, city and country. Transition is relevant to all students.

In attempting to understand transition I will examine culture, identity, culture shock, integration and community I will investigate the living and academic experiences that US Study Abroad students are adjusting to, when embarking on life at UCC.

Particular attention is given to the virtual community as students appear more connected to home, than ever before, due to technological advances. Skype provides a means of free daily contact with home, family and friends. Are students physically here but mentally elsewhere, and consequently missing out on all that study abroad opportunities have to offer? Or does Skype enable homesick students to persevere during difficult times?





#### LITERATURE REVIEW

#### Culture

In seeking to under transition, firstly, I sought to know more about Culture. Geert Hofstede, is a leading proponent of research on culture.

Hofstede (1980,p 43) defines "culture as the collective mental programming of the people in an environment. ...it encompasses a number of people who were conditioned by the same education and life experience".

His research has produced the concept of Hofstede's Cultural Dimensions, consisting of power distance, uncertainty avoidance, individualism and collectivism, masculinity and finally, long term orientation.

US culture is characterised by small power distance, with strong uncertainty avoidance, highly individualistic dimensions and fluidity between roles of men and women that gives society a predominantly feminine rather than masculine nature. Of course, "Characterising a national culture does not, of course, mean that every person in the nation has all the characteristics assigned to that culture." (Hofstede, 1980,p 45) However, US study abroad students move away from the familiar to a new society emphasising a different combination of these dimensions, which may be far outside their comfort zone. The challenge is that "We are all culturally conditioned. We see the world in the way we have learned to see it. Only to a limited extent can we, in our thinking, step out of the boundaries imposed by our cultural conditioning (ibid, p 45 ". Often, the students who are most challenged by the move are the ones who are most rewarded because they have the most to gain, in terms of personal growth and development, by the decision to explore a different way of doing things.

Edward T Hall has written extensively about culture and in particular about what he terms "cultural literacy". In general, it is a sensitivity and understanding of ways of being that are practised by different cultures. It is about more than learning others languages. Hall submits that there are five major categories of difference between cultures: space, time, verbal behaviour, non-verbal behaviour and context.

Ryan (2000) highlights how different cultures and value systems may impact on student motivation, student participation in the classroom and the student-teacher relationship. Hofstede's concepts of power distance and long term orientation are echoed in the findings. In addition the importance of language is emphasised with recognition that international students will have a level of English but local accents and slang may cause unanticipated challenges. Types of assessment and course content and design are usually in line with the formative learning experience of the host country and international students may be required to adopt. Students' orientation to time as well as communication styles are also explored.

Carroll and Ryan (2005) explore these themes further with a more detailed examination of all of these areas while factoring in an internationalisation of the curriculum.

Morrison, Conaway and Borden (1994) provide insights into various nations traditions highlighting norms in the society, which also serve to emphasis differences. For example





there is different cognitive styles, negotiation strategies and value systems for the basis of behaviour.

Education Ireland conducted a pilot survey, The North American Student Experience in Ireland, 2011, of UCC students, which support much of the theories about culture. In defining culture respondents included obvious benchmarks such as music, language, literature, dance, scenery but also less tangible markers such as the people themselves, the friendliness, the way of being and style of doing things, including teaching and learning in a more laid back less stressed ambience.

Hand in hand with culture is the notion of identity.

#### Identity

Another researcher, Stuart Hall is credited with researching cultural identity. He proposes two ways to think of "cultural identity". The first is the broad sense of cultural identity with a shared history, shared experiences and shared cultural codes that unites people with a continuous frame of reference. The second position on cultural identity acknowledges the similarities but also recognises difference.

US study abroad students often identify themselves as "Irish American" when based at home but will identify themselves as "American" when living in Ireland. Jenkins (2004) examines ethnicity as a primary identification. "There is some debate about whether ethnicity is primordial, essential and unchanging, or situational, as manipulable as circumstance require or allow (Jenkins 1997:44-8) "

Eisenstadt and Giesen (1995) put forward a model for analysing collective identities. The main tenets are that collective identity is socially constructed, produced by the construction of social boundaries, which presupposes symbolic codes of distinction, although not purely symbolic. Primordiality is acknowledged as the first type of collective identity followed by civic before progressing to the "us" and "them" of the constitutive boundary. "The core of all codes of collective identity is the distinction between we and others," (Eisenstadt et al, 36, 1, p. 77). This leads to categorisation.

When one culture and identity collides with another the outcome is very often culture shock. US study abroad students experience culture shock, despite all the preparations for living overseas. Many will experience homesickness, at some point or other.

#### Culture Shock

Guallahorn and Gullahorn (1963) and Rhinesmith (1981) developed a culture shock model based on the experiences of US Peace Corps participants. It has been adapted by writers such as Alder (1975) and Westbrook and Barker (1990). It is represented as a series of up and downs commencing with the Honeymoon stage, characterised by excitement and anticipation, before students progress to the Distress phase, when reality begins to sink in, homesickness creeps up and students are depressed, anxious and isolated. It gets worse before it gets better as the Adjustment phase is characterised by hostility and criticism of the host culture. Fortunately, the Autonomy phase marks a turning point and an appreciation for the differences and similarities between the cultures. Finally, there is the Independence stage where a student is comfortable moving easily between the two cultures. Please see appendix 1.





"....The worst thing has been the adjustment ..." (Education Ireland, Pilot Survey, 2011, p24)

There is a lack of empirical evidence but students themselves readily identify with the graph. The timescale for passing through the stages is very individual. The last stage of culture shock is one where students have integrated.

#### Integration

There is limited research of the host students view point, particularly in the Irish context. However, Dunne (2009) examined host students perspectives of intercultural contact in an Irish University. He identified two dominant constructions of cultural differences. The first defined culture based on nationality and the second defined culture based on age. Academic motivation, responsibilities and authority were the main components for identifying what host students regarded as being culturally different.

In overcoming culture shock and integrating into a new environment students will often seek out support and comfort from family and friends. Access on a daily basis is made possible by the technology that is driving the "global village" concept. For today's student the "virtual world" is the " real world".

#### Virtual Communities

Parks and Floyd (1996) set out to investigate whether on-line relationships were shallow, impersonal and even hostile, allowing cyberspace to create a mere illusion of community, or whether cyberspace represented an opportunity to create genuine personal relationships and communities, free from the confines of physical location. The primary findings of the research indicated that personal relationships were common in the cyberspace environment. Parks and Floyd (1996) predicted that online social networking would become mainstream.

Wellman (2001, p227) states that "A computer network is a social network". He asserts that while physical place is important cyberspace is impacting on how people find and maintain community.

Cyberspace and physical space ties operate alongside each other with people accessing and using whichever mode of communication is convenient and appropriate at a particular time. Online social networking is now a part of everyday living. Facebook, Twitter, You Tube and Skype are accessed daily by a diverse user group. For the purpose of this research I would like to focus on Skype, a software package that allows people to chat via the internet.

#### METHODOLOGY

I conducted in depth interviews with four US interviewees and a comparator from Singapore.

In addition I consulted with four Study Abroad Co-ordinators to learn about their views on transition. These included the IFSA Butler co-ordinator and the Student Support Officer at Arcadia University, who is a trained counsellor. I also met with the onsite coordinator of Quinnipiac University, who offered dual perspectives as a registered





overseas student himself in addition to insights that his role provided to the study abroad experiences of Quinnipiac study abroad students. Finally I met with the Holy Cross advisor and with permission from the students, the co-ordinator agreed to give me access to the 16 Cultural Immersion Projects, which had been completed over the last two years.

I had the opportunity to review two student experience recordings, uploaded onto the web, to give prospective students a flavour of student life at UCC.

#### ANALYSIS

#### Transition - The Academic Experience

The host academic environment can be considerably different for US students studying abroad. Study Abroad students are accustomed to receiving very high service levels in their home universities, with a huge amount of guidance.

Calculating module loads and credits and converting them to home university credit requirements can also pose challenges but these are overcome through advisory sections, information booklets and open door access to International Education Office staff.

At home roll calls are standard practice, with lecturers taking a note of who is present or absent. Course work is directed with lecturers advising students which chapters of which books to study when and possibly examining it in a "quiz" or test at the end of the week. Here it is far less prescribed with students doing much more self directed and independent learning. Sometimes US students can be somewhat overwhelmed when they see the recommended reading lists, not realising that they need to be selective in their choices.

Class size can be a challenge, initially, particularly if the US student is from a small liberal arts college. Study abroad students are often accustomed to much smaller class sizes with a lot more class interaction. The student may find him/herself in a lecture theatre with several hundred students, which in their home university may constitute half the student population. This is true for Irish students too who are making the transition from second level classrooms of just thirty or so students to a much larger scale. Crucial to the successful transition to the larger classroom is the tutorial, which allows for smaller student numbers to study topics in more detail, under the tutelage of a tutor, usually a postgraduate student, with greater interaction and options to get to know fellow students.

In terms of assessment as a general rule, the approach is to integrate the visiting student to the maximum extent possible into the procedures normally observed by the Irish student. Visiting students who are studying at UCC for the Academic Year or Spring Semester must sit the normal end of year examinations. No alternative arrangements can be made, although frequents request are received to do substitute essays or alternative course work. The Irish system also allows students to repeat examinations in the Autumn.

The grading system is considerably different and can cause huge distress to students who are accustomed to achieving "straight A's". A grade of 70% here is reserved for extremely high achievers but by comparison in the States it is not so special. It can take time for study abroad students to adapt and realise that in the context of their new





learning system and study abroad experience they are achieving in parallel to their home university grades. "I just got a 65 on an essay and freaked out. I was like I just failed an essay. Oh my gosh it's not a 70" (Quinnipiac University student interview, 2011).

Disability Support Services, caters for the needs of students with both physical and hidden disabilities. US students with disabilities are often shocked that they will be obliged to adhere to UCC rules on additional time for examinations, which at an extra ten minutes is far less generous than the US system.

Staff contact hours; While visiting students are delighted to have access to lecturing staff during specific contact hours some are more accustomed to approaching lecturing staff when it suits them rather than at a designated time.

There are advantages and disadvantages to both educational systems. One understandable frustration for US students, shared by many of their EU peers, is their inability to judge progress or monitor how well or otherwise they are doing. The system here places far less emphasis on continual assessment and much more weighting on end of term examinations. Continual assessment results are not based on the score cards that US students are familiar with and feedback is often limited, due to external examiner constraints or may be untimely, so the student may not be able to take advantage of the learning benefit for the next assignment.

"I haven't gotton my mid-term back so I really have no idea how I'm doing or how I can really prepare for the next exam" . ((Quinnipiac University student interview, 2011).

Transition - The "Living" Experience

#### Accommodation

A wide range of accommodation options are offered to visiting students. Students can choose to live on-campus in purpose built apartment blocks or off-campus in private housing. For some US students studying abroad the notion that campus accommodation is not actually in the middle of a greenfield site is at odds with their expectations, based on their home experience. Walking short distances from campus accommodation to main campus is met with requests for a shuttle bus service.

US students may also come from a dormitory style accommodation, in some cases sharing a room with another student, and they welcome apartment style living. Dorms are generally gender specific. Apartment here are generally gender specific, although some are mixed. Usually, US students avail of a "meal plan" option and cooking for themselves may be a new challenge, especially since the culture in the US is to eat out more.

"I like meal plans. We complained so much about our cafeteria. ....What I would do to go back and have that salad bar right now". Those with Irish flatmates are soon introduced to the ritual of the "cup of tea". "Who knew such a simple act as taking tea would forge such strong friendships and create such a memorable experience? " (Quinnipiac University student interview, 2011).

While US students have a preference for living with Irish students this is not reciprocated. Various reasons are posited but most frequently it is the fact that there stay is short term in nature. Irish students return home at weekends, citing





commitments to part time jobs and local football teams etc. However, support services have long suspected it has more to do with home cooking and the laundry service!

Standards of hygiene or lack of may be a source of disharmony amongst different flatmates. Students from the US have particularly high standards.

"I have two Irish roommates .... I got to know them so I'm good friends with them and like I'm going to be going home with them for Easter .... It was different cause right their lifestyle is different. For some reason they don't like to clean up (Quinnipiac University student interview, 2011)".

#### Socialising

Fraternity and Sorority houses have been a part of university life in the States since the middle of the 19th century. "Sororities began as a way for women to find intellectual and social companionship with one another". At their best fraternity and sorority houses offer a smaller community within a university setting, lifelong friendships, a support network, housing and opportunities for leadership and service. Negative associations include eliticism, racism, "hazing" (mistreatment of a new pledge member) and alcohol abuse.

In Ireland Clubs and Societies are run by students, for students. Both, offer students an opportunity to make friends, develop the organisational, leadership and interpersonal skills, often sought by employers. All, are open to all registered students. There is no pre-requisite for membership. If a student has a particular interest that isn't catered for then the option to establish a new club or society is available. It is through this inclusive policy and common interests that most of the international study abroad students and Irish students alike will make lifelong friends, acquire life and transferable skills while having fun and immersing themselves in the student experience. University life is not just about an education. It is about personal growth and development.

"We initially met through Societies... it was Philosophy, which is the debating society .... it's a really good way if you are an international student to meet people and to actually meet Irish students as well ...".

#### Alcohol

Irish law permits adults aged 18 and over to consume alcohol but in the States it is aged 21 and over. Generally, US students will not indulge in the binge drinking habits so often practiced by host students. It seems that US students have more in common with their Irish counterparts when they are on home territory while they adopt a more sensible approach to alcohol overseas.

"It's different. It's better ... well this is going to sound horrible. At home we like binge .. I'll go out like and take like a bunch of shots before I go out so I'll be like drunk for the night because I can't buy it but here I can just like drink a couple of beers and maybe get a drink at the bar if I want to. " (Quinnipiac University student interview, 2011)

#### Healthcare

Us study abroad students are often higher users of the health services and counselling services on campus. In the US it is a cultural norm to be attending therapy. Medications that are widely prescribed in the US may not be licensed here, particularly





with regard to allergy medication. Study abroad students may have little awareness around the fact that they cannot access a particular drug here or that importing it is subject to licensing and customs regulations.

#### Immigration

US citizens do not require visas to come to Ireland. However, all non-EU citizens coming to Ireland for a stay that exceeds 90 days are required to register with local Immigration. For the vast majority of students the process is straight forward with no issues arising. However there are always the exceptions. In discussion with an official from one of UCC's partner institutions I learned that in terms of values and norms Immigration is not something that study abroad students apply to themselves ... it is for someone trying to get into the US. "The worst was the process of going to the Garda" (Education Ireland, 2011)

#### Safety

Of paramount importance to both incoming and outgoing Study Abroad students is safety. Comparative studies reveal that Ireland has one of the lowest crime rates internationally, however media reports distort this reality. O' Connell (1999, 208) believes that the "sensational media accounts of crime lead to an overly pessimistic, fearful and extreme public perception of crime ..." . O' Donnell and O' Sullivan (2000) concur. The people least likely to be victims of crime in Ireland are most likely to fear crime. Students are quite shocked to learn that the Gardaí do not carry guns. Violent crimes on the person are extremely rare in Ireland.

Sometimes students will see Ireland through the rose tinted glasses of the John Hinde postcard, perpetuated by the memories passed down through generations of Irish born grandparents. One student returned home from a weekend away to discover her prized possessions missing. Leaving the window open in a ground floor apartment was not something she would do at home but she didn't think taking this common sense precaution was necessary in Ireland. That said, one student commented "We feel so safe. You can go anywhere at any time and feel safe. ...More safe than I do in the city that I live in at home". (Quinnipiac University student interview, 2011)

Having analysed transition in terms of the academic experience and the living experience I now examine the role that Skype plays for US Students in Transition.

#### Role of Skype

All the students I interviewed use Skype. The frequency and patterns of use differed significantly. All used Skype to reassure parents of their wellbeing and to stay in contact with friends and family at home.

So, is the amount of time spent on Skype affecting US study abroad students' transition in a positive or negative way? Are they spending so much time online that they are missing out on the true experience of connecting with local community? Or is Skype facilitating an easier transition to a new environment?

Sam was a regular user and found it very helpful.

"I think I use Skype every day. I mean to different people. My parents have it. My grandfather learned to use it, which was really hard to teach him but he got it down .





And then most of our friends have it. Not only is it the video chatting ... you can actually just chat on it. It 's been really extremely helpful. It's expensive to call home . It very expensive. ... what a great way for free to talk to people for as long as you want and as often as you want. It's pretty cool". (Quinnipiac University student interview, 2011)

Another student, Mary, used it infrequently, since her laptop broke, 6 weeks after arriving. Now, her access to Skype was limited. She occasionally borrowed her friend's laptop with the sole purpose of checking in at home. She conceded that was her computer in working order she would be using Skype a lot more.

Mike, averaged twenty minutes a day as a norm but could be up to two hours online. He claimed to be well integrated due to the fact that he lived with Irish flatmates. Chin, the Singaporean student, often left Skype running in the background, while he was going about his daily chores.

Interesting the male interviewees appeared to be greater consumers of Skype than their female counterparts. Time differences dictated when Skype calls occurred.

All the students were using Skype as a means of sharing their study abroad experiences with family and friends. Sam explained that she used Skype shared screen to show her Dad her photos from London. "It was just another way for us to connect and for him to understand what I did that weekend". (Quinnipiac University student interview, 2011)

None of the students thought their Skype usage interfered with their ability to integrate. The general consensus was that Skype was a tool to stay in touch with family and friends. They all used it as a means to offset homesickness.

Sam doesn't believe it is a hindrance to integration.

"I won't Skype until late at night when I'm not planning on doing anything anyway so it never inhibits my day plan, I'm never rushing to get home to Skype with this person... so it doesn't inhibit ..." (Quinnipiac University student interview, 2011)

One unexpected finding emerged when one of the students revealed that she would use Skype messaging to alert friends in the different residences, that she was leaving her apartment now for their rendezvous with them. "Meet you at the light in five minutes. I live in Farranlea. She lives in Vic lodge". (Quinnipiac University student interview, 2011)

Perhaps Chin captured the essence of Skype's role for all the students interviewed when he said

"...to me, I think Skype, is still as a means of connecting with existing friends and it is like maintaining a relationship and it is not like building another one. It's not a social network." (Nanyang University student interview, 2011)

This would appear to be the case too when they return home and seek to stay in contact with the Irish friends that they connected with during their Study Abroad studies. "As I sit here in Syracuse, NY putting the finishing touches on this ICIP project, I am actually talking to one of my Irish friends on Skype" (Scholl, 2009).





#### CONCLUSION

In researching US Students in Transition I explored theories on culture, identity, integration, culture shock and virtual community. Hofstede's cultural dimension concepts consisting of power distance, uncertainty avoidance, individualism and collectivism, masculinity and finally, long term orientation are depicted by both US and Irish cultures. Consequently, the concepts are borne out to varying degrees by US students in transition. The extent to which each concept applies varies from student to student depending on personal life skills and experiences. It is also contingent upon the particular environment that each finds themselves in. Hall's orientation to time theory is particularly relevant with many students citing different cultural attitudes to time. Hall's verbal behaviour theory regarding language was described by students who discussed accent, speed of speech before giving examples of slang. Ryan's insights on how different cultures and value systems impact on student motivation, student participation in the classroom and the student-teacher relationship were confirmed.

With regard to the identity theories posited by Hall, Jenkins, Barth, Brubaker and Cooper as well Eisenstadt and Giesen my findings indicate that cultural identity, ethnicity, categories and collective identities also featured for US students in transition, suggesting that these theories had some merit, for this particular cohort.

Anecdotal and empirical evidence from US students in transition suggest that the "W Curve" culture shock theory is very much a real experience for the majority of study abroad students.

The virtual community, or at least Skype, has played a crucial role in offsetting homesickness and empowering and enabling students to continue with studies overseas. Students didn't agree with Wellman's assertion that cyberspace helped to find community, well at least not through Skype. However, they did concur that cyberspace played a role in maintaining community by enabling them to link with family and friends at home, within the local vicinity and with new Irish friends on their return home.

Parks and Floyd's 1996 prediction that social networking would be employed for ordinary and mundane social use has been realised, by these students.

They saw it as just another tool to stay in contact, much like the telephone, only cheaper. It was helpful when homesick and certainly not a hindrance to integration.

I conclude that it is true to say that the overarching theories of culture, identity, integration, culture shock and community are applicable to US and Irish culture, and thus to US students in transition to Ireland. The empirical evidence of the "living" – accommodation, socialising, alcohol, healthcare, immigration and safety - experience confirmed that the theories were very much a part of everyday life for the students. The empirical evidence of the "academic" – modules, class size, assessment, grading, and performance feedback - experience also support the theories.

However, the methodology is subject to several limitations. Firstly, the interviews were exposed to a sampling bias. The interviewees came from the same home University so it is not a true reflection of the diversity of the US study abroad student cohort. In addition the University has a full time on site co-ordinator helping to minimise adjustment difficulties. This compromised my findings. These students were less likely to have had the transitional issues that I was hoping to expose. However, I knew that if





they identified themes then it was likely that other students, who did not have the benefit of an on-site co-ordinator, were likely to parallel the experiences.

The Cultural Immersion Projects proved to be very helpful in validating the findings of the interviews and co-ordinator consultations.

Meta analysis of surveys and voice recordings did corroborate my findings but there were also limitations. Both had been designed for different purposes such as promotional activities, and therefore produce a particular type of answer.

Finally, there is scope for to carry out further research in the field of US Students in Transition. This project has only allowed me to examine the experiences of a small number of students. I'd like to gain a deeper understanding through further research on a larger scale with a more diverse group, comparing and contrasting the experiences of US students in transition, from different college backgrounds. This would afford me the opportunity to learn if US students in transition are a homogenous group, with similar experiences or otherwise.

#### **Appendix 1: Culture Shock W Curve**

#### W-CURVE: STAGES OF ADJUSTMENT EXPERIENCED DURING ORIENTATION



Adapted from "Orientated for Success", edited by M Barker, Australian International Development Assistance Bureau, 1990.







**Suzanne Buckley**, Support Officer for International Students, joined the International Education Office UCC team in 2002. Her focus is student welfare, in all its facets. The role involves helping international students to settle in and enjoy their stay; Suzanne acts as an identifiable point of contact with the various services on campus, seeking to ensure that problems of adjustments are minimised and that students derive the maximum benefit and enjoyment from their time at UCC.

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### Developing a Culture of Participation in Physical Activity on a College Campus

Niamh M. O'Callaghan

#### Abstract

One of the key strategic priorities identified of sports departments within Irish Higher Education Institutions is the promotion and development of new policy initiatives to maximise participation levels. Many studies which were published in other countries identified certain benefits and barriers to physical activity among college students. However to date most of the research undertaken in an Irish context focuses on assessing the direction and strength of trends in active participation of Colleges students but there has been little if any research carried out, academically, on how students engage in physical activity. This study tries to rectify this with a study of students at the Dublin Institute of Technology.

DIT students (n = 283) were recruited to the study. Reasons for and perceived barriers to physical activity and student's attitudes to participation in physical activity were assessed in the form of a questionnaire and focus group session. "Lack of time due to academic pressures", "lack of time due to engagement in other interests", "lack of time due to part-time work were most cited barriers to physical activity which is consistent with the findings in other studies of this specific sub-group. The findings of the focus group study highlighted a number of important issues that were not established from the data gathered in the questionnaire. The perception of sport and physical activity; the way in which, sports activities were organised; awareness and accessibility of sports facilities were among the most critical factors that impacted negatively on participation in physical activity programmes at the Institute.

In conclusion a number of key physical activity interventions were recommended to enhance physical activity among DIT students and to facilitate environmental and institutional change to support, develop and promote a culture of participation in physical activity on a DIT College Campus. However there is a need for future research, which will be carried across the third level sector to develop national standardised instrument. This will be effective for accurately identifying perceived benefits and barriers to inform future policy making in the development of new third level participation interventions to enhance physical activity levels on a college or university campus.

#### Introduction

Because of well documented personal, social and health benefits of physical activity, there is concern about the dramatic decline in physical activity over the life span. Research as consistently demonstrated that physical activity levels fall significantly during the period adolescence to young adult. There are further decreases in physical activity during the typical university/college students, by those aged eighteen to twenty one, by six percent for men and seven percent for women (Calfas et al., 2000) and the rates of physical inactivity among Australians in the twenty to twenty nine year age group are twice as high as in those aged less than twenty years (Leslie et al, 1999). Leaving school and attending a college institution is arguably what is known as a major life transition and generally life changes were found to have a negative effect on





participation in physical activity (Allender et al., 2008). Irish College students represent a major segment of the young adult population, in 2009, 55% of young adults participated in some form of higher or further education programme in Ireland with the Irish government setting a rather ambitious target of seventy percent of young adults participating in third level education by 2020, considering that European statistics illustrate that fifty percent is the norm (Irish Sunday Times, 2010). As such they are a group worthy of study and may also be the focus of future policy decisions from decision makers involved with increasing the social, political and health policy importance of physical activity.

'Adult participation in physical activity is influenced by a diverse range of personal, social and environmental factors' (Dishman, 1994; Trost et al., 2002). It is argued that college students are members of an age group that undergoes change in cognitive factors such as (personal attitudes towards physical activity) and social factors (lack of peer/family encouragement to exercise) that can contribute to a decline in levels of participation in physical activity (Allender et al., 2008). Sallis and Hovell's (1990) social learning model of physical activity participation describes the role of a range of factors to explain physical activity patterns with specific consideration drawn to the target audience. It includes (enjoyment of physical activity, self-efficacy for exercise, family and peer influences and access to facilities). This diverse range of factors can either have a positive or negative impact on participation in physical activity.

Perceived benefits can positively, perceived barriers can negatively influence participation in physical activity (Myers and Roth, 1997).

Findings in similar established studies highlight health and fitness as being the most important bases for participation of college students in physical activity (Mathes and Battista, 1985; Allender, 2006). Many studies undertaken in other countries have evaluated perceived benefits and barriers to physical activity among College student's (Booth et al., 1997; Daskapan et al., 2006; Zunft et al., 2007).

Perceived benefits can be physiological or psychologically based factors; Perceived barriers may reflect environmental factors (external barriers), such as low resources, lack of time or lack of support or may represent more individual, psychologically based factors (internal barriers, such as lack of motivation, other interests or concerns about engaging in physical activity in public (Alison et al., 1999).

However to date most of Irish research undertaken in this area focuses on quantifying active participation of students and little research on the role of the different factors influencing participation in physical activity (Gallagher, 2009; Lunn & Layate, 2010). It is crucial that the factors influencing physical activity levels of Irish College students are identified in order to develop relevant policies and effective interventions to encourage the adoption and maintenance of regular physical activity. Kahn and other authors (2002) believe that physical activity interventions are most effective when they target changes in four spheres: intrapersonal, social, physical activity promotion programmes and intervening with young adults, through approaches that could be institutionalised to encourage and develop a lifelong involvement in physical activity (Calfas, 2000; Buckworth, 2001; Chen, 2006; Ferrara, 2009). Access to on-campus facilities and awareness of facilities has the potential to 'foster social interactions' and 'promote positive lifestyle and culture' (Chen, 2006). However unless more recognition is





paid to why this specific population sub-group do not participate in physical activity, the effectiveness of interventions to promote physical activity will remain short term and moderate as they transition through higher education. The purpose of this study was to identify the perceived benefits and barriers to physical activity of DIT college students in order to make recommendations to inform future policy making in the development of new physical activity interventions.

#### Methods

#### Subjects

The study was completed at the Dublin Institute of Technology. For this study a mixed methods design format was adopted to bring together both quantitative and qualitative methods in the form of a questionnaire and focus group session. Taking into consideration that the current full-time student population numbers is in excess of 10,000, it was decided that 300 respondents were required to provide sufficient data. In order to achieve a representative sample across the six constituent college campuses convenience sampling stratified by DIT College Campus was carried out. A total of 283 students participated in the study which equates to a response rate of greater than 90% of the initial 300 responses that were to be targeted at the outset of the study. There were 144 males (54%) and 129 females (46%) that completed the questionnaire and 5 males and 5 females that participated in the focus group session. The criterion required the respondents to be a student of DIT, a non-participant in any kind of physical activity programmes organised at the Institute and over the age of eighteen years of age. Students less than 18 years of age were excluded from this study because of the ethical issues pertaining to securing consent from relevant guardians. Written informed consents were obtained from the participants of the focus group session. The study was conducted between April and June 2010.

#### Instruments

A questionnaire in the form of an online survey and offline version was designed to collect statistical data including: personal details; physical activity patterns; and motivations for and perceived barriers to participation in physical activity programmes at the Institute. Closed questions were used for the majority of the questionnaire but a few open ended questions were included to examine the attitudes and opinions of students to participation in sport and physical activity at the Institute. A minimum of thirty questionnaires were set as a target to be completed by students on each of DIT college campuses and a total of 273 students responded.

A focus group was conducted after the questionnaire was administered and ten students were randomly selected and asked to participate in the focus group session. An interview schedule with a series of categories of questions was devised for the focus group. As the questionnaire had highlighted a number of important issues in the open ended questions that could be explored in greater depth, it was necessary to probe through open discussions in the focus group. The discussion lasted for more than 1 hour and 10 minutes and information was recorded on an audio advice and later transcribed to accurately reflect and document the thoughts, feelings and opinions of the participants of the focus group.





The study included 283 students. A total of 273 students completed the questionnaire and findings and analysis of physical activity patterns and the main motivations for and perceived barriers to participation in physical activity were identified and deliberated by means of graphs.



*Figure 1: Do you currently engage in any regular physical activity outside DIT?* 

To further clarify the above question, students were provided with examples of active engagement in physical activity; 30 minutes of participation in such activities as cycling at a moderate pace, walking briskly and active involvement in games, sport or recreation. Among females the rate of regular physical activity was lower than males. However this data is only useful when the frequency or duration data is provided (Figure 2).





The rates of physical inactivity among females were considerably higher than males. Over 64% of females did not meet the recommendations of levels of physical activity





and nearly 50% of men did not meet the current guidelines of participation in physical activity.





The main motivations for participation in physical activity of the eleven possible reasons listed in the survey are highlighted in Figure 3. "To maintain good health", "to get fit" and "for fun" were the most important motivations to participation in physical activity. The only gender differences were highlighted in the motivation "to control weight" with more than 20% of females concerned about maintaining a slim body shape through participation in physical activity.

Figure 4: Barriers to participation in physical activity at DIT



There were sixteen perceived barriers listed in the questionnaire and the main barriers identified are represented in Figure 4. The most frequently cited external barriers were all related to a "lack of time". "No motivation" was the most important internal barrier to participation in regular activity.





Figure 5: Are you aware that the college has sports facilities on campus?



Nearly 40% of students surveyed were not aware that the Institute had sports facilities located at Bolton Street and Kevin Street College Campuses. And worryingly more than a third and nearly a quarter of student studying at Bolton and Kevin Street college campuses respectively did not know that sports facilities existed on site.

Figure 6: Preferred types of support to encourage participation



More than 50% of student's highlighted peer support "exercise in a group" as their preferred type of support that would encourage them to become more active in physical activity programmes at the Institute. The support of professional coaching staff and the development of alternative communication platforms "e-mails or texts" was also deemed to be important to promote student participation in physical activity programmes at the Institute.







#### Focus Group

The participants of the focus group raised a number of issues that were not established from the date gathered from the questionnaire namely "the perception of Sport at DIT; "no casual attitute, very professional, no room for people who just want to participate for social aspect"; the way in which, Club activities were organised "there is no affinity to DIT, students identified with their own individual campus environment", "its daunting to get involved in a DIT activity"; awareness and accessibility of sports facilities "there is a lack of facilities or open spaces on college campuses to just kick a ball around", "access and lack of facilities" were among critical factors that created barriers to participation in physical activity programmes at DIT. Other perceived barriers that were also mentioned in the discussion were "lack of a social or recreational aspect"; "lack of motivation"; "commuting distance from home to college".

#### Discussion

Regular physical activity improves health and psychological well-being (Paffenbarger et al., 2001; Miles, 2007). (Larson, 2000) in his study cited several researchers who confirmed a positive correlation between participation by students in physical activity with significant lower levels of stress. Participation in physical activity is associated with many desirable outcomes yet more than 50% of Irish students are inactive (Ward, 2009). Findings from the survey showed that 64% of female students and nearly 50% of male student's, did not meet the recommended physical activity guidelines as recommended by the World Health Organisation (WHO, 2004). This raises the question to why participation in physical activity is so low? This data reinforces the need for further research to identify the reasons for and perceived barriers to physical activity that influence participation of Irish college students.

In the survey over 90% of student's identified "to maintain good health" as being the most important motivation to participation in physical activity. Other significant predictors to participation were "to get fit"; "for fun"; and "personal satisfaction". The motivations for participation reported in the student population of established studies are consistent with findings in the survey which suggest that the college population are attracted to activity programmes that promote health and fitness as being a fun social experience (Mathes and Battista, 1985; Allender et al. 2006). However the focus group discussion raised an important issue about the perception of sport at the Institute as being "a very competitive sporting environment" "lacking in a recreational dimension". Students felt that the physical activity programmes offered at the Institute were lacking a social or fun dimension yet their primary motivation to participate in physical activity is for fun and enjoyment. This finding might shed some light on the interventions to promote and increase physical activity levels among DIT students.

The main barriers to participation were a 'lack of time' due to academic pressures and part-time jobs taken to support academic and social pursuits. These findings are consistent with findings in other studies which cite a 'lack of time' as being the greatest barrier to participation in physical activity of the student population (Alison et al., 1999;





Leslie et al., 1999). One study reported the greatest barrier was lack of time due to academic pressures and responsibilities related to the family and social environment on university students (Daskapan et al., 2006). Perceived external barriers seemed more important than perceived internal barriers and the only internal barrier that rated highly in the survey was "no motivation". This finding is not in accordance with previous studies which have shown that perceived internal barriers were as important as perceived external barriers in young people (Alison et al, 1999; Leslie et al., 1999). One possible reason may be related to the mean age of the sample students (n 21.5) which is considerably higher than the mentioned studies.

However, findings from the focus group discussion identified other perceived barriers that were not so prevalent in previous studies. "Access and lack of facilities"; "lack of open facilities on college campuses to just kick a ball around or participate in any spontaneous type activity" at the Institute were cited as having a negative impact on participation. This finding is in agreement with previous studies that have demonstrated access to facilities and awareness of sports facilities as having a positive association with being active (Sallis et al., 1990; Leslie et al., 2001). One study investigated the relationship between the availability of recreational sports facilities and the student lifestyle and social interaction in the US Universities and findings reported that the availability of "recreational sports facilities do foster high social interaction among students and contribute to an active, integrated, and positive campus lifestyle and culture" (Chen, 2006). Yet 40% of students surveyed were not aware that the Institute provided on-campus recreational sports facilities. These findings demonstrate that the Institute is missing 'a focal recreational point' to facilitate social interaction and do not currently have the necessary physical environment conducive to encouraging participation in physical activity on campus or innovative marketing campaign to promote the provision of facilities on campus.

More than 50% students surveyed identified their preferred source of support to become active is to exercise in a group. A slightly higher percentage of females just over ten percent preferred the support of group exercise. Coach or instructor advice ranked high at 39% and 27% would prefer like access to a text-link service that sends reminders and prompts of the activities that are being offered at the Institute. The findings of this study are supported by the findings of other reputable studies that have concluded that social support has a positive correlation with physical activity. (Booth et al. 1997) reported that the preferred source of support for the younger age group, eighteen to twenty nine years, was the opportunity to exercise in a group with peers. (Leslie et al. 1999) found that students reporting low level of social support were twenty three to fifty five percent more likely to be insufficiently active than those receiving higher levels.

These findings influencing student participation in physical activity are crucial to inform policy making in the development of new effective participation interventions to enhance physical activity levels at the Institute.





#### **Recommendations of New Physical Activity Interventions at DIT**

#### **Informational Interventions**

1. Re-branding of College Sports Departments to promote 'Activity for All' aspect. The enjoyment, fun, healthy and social benefits of participation in physical activity must be incorporated into the branding image.

2. Develop an innovative mass media marketing campaign to promote accessibility and awareness of on-campus sports facilities as they are intrinsically linked as having a positive association with being active.

3. Introduce new college based physical and health education initiatives as part of the overall health awareness programme. Initiatives should be focused on a variety of physical activity education and health issues designed to empower students to make good decisions regarding participation in regular physical activity.

4. Promote physical activity and exercise in non physical environments and use catchy colourful slogans to make them more visible. Motivational signs could be placed at stairwells encouraging students to walk instead of taking the lifts. 'Stay healthy, save time, use the stairs' is an example of a 'motto' that could be promoted to encourage students to be active in a non physical environment. The signs could be tailored with different prompts to specify the different benefits of regular physical activity such as weight loss, increased physical activity levels and make them informative and motivational with realistic goals.

5. Design and produce a 'Get Active' monthly flyer or e-zine to promote the physiological and psychological benefits of participating in regular physical activity on a college campus. Class representatives could be used as an effective way to communicate to students at grass root levels, the social interaction aspect of participation.

6. Provide health-related information and campus walking and biking maps via an online website and develop new social networking systems such as chatrooms and blogs to communicate positive healthier lifestyles on campus.

7. Organise mass media campaign in partnership with other student service groups aimed at promoting a positive campus lifestyle and culture. Investigate ways of understanding how to best to disseminate health information (and sharing resources) such as in classroom, in social settings, on Moodle.

#### **Behavioural and Social Interventions**

1. Develop new social networking initiatives that provide supportive relationships for behaviour change around physical activity similar to the peer mentoring programme that is currently in place in the Institute. Introduce a buddy system or other appropriate group settings to provide friendship or support for students to engage in regular physical activity.





2. Explore common approaches to recognising non-traditional modules and rewarding sporting and physical activity engagement in college. An accreditation participation module to recognise involvement in extra-curricular activities should include a participation component. Third level education is the last opportunity to prepare youth for an active lifetime so a two credit one semester course, with a one hour weekly lecture delivered by a lecture experienced in the fields of behavioural and exercise science and a practical application of participation in some form could be developed.

3. Increase opportunities for physical activity on campus and organise class and faculty based intramural activities. Students are more likely to participate in a physical activity if it is delivered in a friendly social environment with the support of their peers.

4. Develop possible synergies with the health or medical services to support population-wide health promotions and develop individually-adapted behaviour change programmes tailored to a students' readiness for change, specific interests and preferences. Fitness programme could be designed by fitness professionals employed within the on campus sporting facilities to encourage the adoption and maintenance of regular physical activity.

5. Develop and deliver a dynamic and stimulating programme similar to 'Get in Gear' programme organised by UCD Sports Department. The programme should be delivered to in a fun social environment with emphasis on participation.

#### **Environmental and Policy Interventions**

1. Establish a steering committee with key representatives of student service groups, the buildings office, space management and other appropriate university/college departments to advocate for environmental changes through the identification of a number of non physical environments that could potentially be used for other types of activities. Yoga, dance, table tennis and other such activities could easily be organised in a limited space.

2. Lobby with the University/College authorities to change the structure of the academic year as semesterisation has impacted negatively on the academic year. The amount of time available to students to participate in extra-curricular activities such as regular physical activity has been seriously curtailed.

3. Lobby the government for new policy approach to compulsory participation in physical activity or physical education at third level. Physical activity interventions are vital during this major life transition from adolescence to adult coupled, with leaving school and attending college. Liaise with other third level institutions to progress further with proposed new policy change.

4. Develop new bike to work programmes with ride-to-work incentitives promoting the bike as a healthy alternative mode of transportation on campus and in the community. Lobby University/College authorities to provide additional showers and changing facilities, and bicycle racks.





#### **Conclusions and Future Research**

In conclusion, there is a range of personal, social and environmental factors that influence physical activity patterns of students at DIT. As can be observed from the study, participation is primarily motivated by health & fitness and enjoyment and the development and maintenance of social networks. Perceived external barriers to participation seemed more important than perceived internal barriers. Lack of time was the most frequently cited external barrier and lack of motivation was the most important internal barrier. Other important barriers including access and lack of on-campus sports facilities and the perception of sport as being very elitist and lacking in a recreational dimension were highlighted as having a negative impact on student engagement in physical activity programmes at the Institute.

The main aim of this study has been achieved as reasons related to physical inactivity were identified in order to make recommendations to inform future policy making in the development of new physical activity interventions at the Institute. Findings from the study may also shed light on interventions to enhance physical activity levels in the wider Irish student population.

However physical activity interventions should be age appropriate and facilitate environmental and institutional change in order to enhance physical activity and promote a culture of participation among Irish college students. College and university are offer ideal settings for the promotion of regular participation in physical activity. However there is a need for future research, which will be carried across the third level sector to develop national standardised instrument. This will be effective for accurately identifying perceived benefits and barriers to inform future policy making in the development of new third level participation interventions to enhance physical activity levels.





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# 'So how was it for you? Students with disabilities transitioning to higher education: preliminary findings from a mixed methods study.'

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#### Abstract

This paper describes Phase 1 of a study examining the experiences of students with disabilities transitioning from 6<sup>th</sup> year of secondary school to higher education. It examines preliminary findings from a web-based strategy to facilitate transition planning for second level students, parents and others critical in the transition process. The study employed a mixed method triangulation-transformative-convergent design, with equal weighting and merged results. Data was collected from web-based surveys and discussion forum content and addressed key questions such as: are transition initiatives / practices working for students with disabilities? What lessons can be learned from listening to the student voice? How should the 'system' respond? Results are discussed in relation to future practice and research.

#### Introduction

Students experience significant changes in their learning environment, teaching approaches, and peer and social networks when they progress to further or higher education. For students with disabilities, this experience is fraught with additional challenges and there are particular issues with respect to obtaining concise, transparent and easily accessible information regarding course choice and access routes. The national targets for students with disabilities set by the Higher Education Authority (HEA, 2008) and strategic objectives of Trinity College (Trinity College Dublin, 2009) acknowledge such issues. However despite recent increases in participation of students with disabilities in Higher Education, there are still significant barriers at all stages of the student journey. In the secondary school cycle these barriers continue to impede students - particularly those with physical and sensory disabilities - from accessing Higher Education. Whilst there is a dearth of knowledge regarding the human experience of transition for second level students with disabilities in Ireland, Project IRIS (Inclusive Research in Irish Schools) includes a study of access and progression experiences of students with special educational needs moving from compulsory education to further and higher education (McGuckin, Shevlin, Bell and Devecchi, 2011).

'Pathways to Trinity' <u>www.tcd.ie/pathways-to-trinity</u> was designed as a web-based strategy to facilitate transition planning for second level students, parents and practitioners as stakeholders in the transition process. The Equality Challenge Unit UK (Felsinger and Byford, 2010) identified pre-entry activities as a reasonable adjustment for students with disabilities and found that 'the most commonly cited mechanism of




communicating disability ... is the institution's website'. This study also recommended that strategic actions should include public dissemination of information on requesting reasonable accommodations, entitlements and supports.

Thus the purpose of the Pathways website is:

- to act as a repository for information relevant to all aspects of the application and admissions process for students with disabilities, that is both generic and Trinity specific. This includes demystification of the jargon usually associated with these processes, and provision of advice and guidance which is accessible to all.
- to provide access to academic skills and assistive technology resources which can assist with Leaving Certificate study, and facilitate a level of competency and confidence which contributes to successful transition into the first year of college.
- to identify issues related to transition in order to inform future practices within senior cycle and third level education.

## Research context

Transition assessment and planning is legislated for across all states in the USA via IDEA (2006), and is increasingly the focus of longitudinal studies in the UK (Aston et al. 2005), however no equivalent initiatives are currently provided at a national in Ireland. Rose and Shevlin (2010) make clear statements about the necessity to ensure that students are encouraged to voice their needs, intentions and aspirations for the future, and to support such engagement and participation. They draw attention to the need for developing tools that permit pupils to engage in self-evaluation as a means of moving towards achievable goals using a 'systematic approach to investigating pupil responses'.

## Research questions

The objective of the study was to identify issues related to transition of students with disabilities in order to inform future practices within senior cycle and third level education. By identifying the main issues and examining the frequency of co-occurring experiences it may be determined whether such experiences are generalisable. The principal aims therefore are:

1. To document access to initiatives, advice, support and guidance using online surveys embedded within a dedicated 'transition' internet site.

2. To investigate personal perceptions of the impact of disability and to determine how these affect academic aspirations and achievement via an online discussion forum.

3. To re-examine transition experiences at the conclusion of the first year of undergraduate education, through a thematic analysis of in depth interviews.

4. To use an emancipatory methodology that permits students with a disability to voice their experiences of transition.







In order to formulate research questions a hierarchy of concepts was constructed (Figure 1) to assist with visualizing such questions.

General	
Research area:	experiences of second level pupils with disabilities
Research topic area:	determinants of successful transition from secondary school to higher education
Research objectives:	investigation of the relationship between disability and successful transition
Research question:	what is the relationship between disability and access to / completion of successful transition?
Specific questions:	what is the relationship between disability type and transition?
	what is the relationship between school type and transition?
	what is the relationship between access to support and transition?
	what is the relationship between quality of support and transition?







## Methodology

Creswell and Plano Clark (2007, p.5) describe the Mixed Method (MM) approach as 'a research design with philosophical assumptions as well as quantitative and qualitative methods', based on a belief that combining both perspectives provides a clearer understanding of the research problem or question. A mixed method approach enhances the data by using qualitative methods as a tool for exploration, and quantitative methods as a tool for explanation.

The epistemology that emerged suggested the need for a concurrent-transformativetriangulation-convergent design, where qualitative and quantitative approaches are used simultaneously to 'confirm, cross-validate, or corroborate findings within a single study' (Creswell, 2003, p. 217). Data is then converged within either the analysis or discussion of findings, with the aim of providing a complementary inference, where these two different strands of investigation provide complementary conclusions or interpretations.

## Research environment

Internet sites and message board forums are examples of communities of practice and discourse communities, and can be considered as a 'third space' (Wilson, 2003). Third space theory (Bhabha, 1994) views these spaces as 'discursive sites or conditions that ensure that the meaning and symbols of culture have no primordial unity or fixity'. The internet is an example of a third space that is neither home nor school nor work, and thus is potentially emancipator. Individuals with disabilities are free to communicate without the constraints and boundaries of traditional communication models, and within an environment that is not geographically confined.

It is crucial to gain an understanding of how disabled individuals can engage in communities of practice to support their own learning. Equally important is observation of the ways in which the communicative freedom offered by virtual environments, facilitates a social construction in groups where normal contact is a pivotal difficulty. As more individuals join the message board and post communications, the space expands to become more than just a tool or resource. The website examined in this study operates as a community where members are able to construct a personal and social identity, without risk of rejection, thus providing new possibilities for positioning and identity.

Increased interest and adoption of virtual learning environments, particularly within higher education, might be expected to increase the participation of students from nontraditional groups. Woodford and Bradley (2004, p. 7) support this argument stating that 'being able to share experiences allowed for peer support in the form of emotional discharge. Thus the feeling of isolation was reduced even though they were unlikely to meet or recognise other contributors.'





Internet communities are a rich source of naturalistic data. Osvaldsson (2011) examines experiences of bullying via an internet community, specifically using postings submitted by young adults with mental health difficulties. Osvaldsson describes these texts as representing an 'unprompted and contextualized account' of experiences (p. 321) and recommends that there is a need for 'more research based on unprompted, naturalistic data for issues such as bullying' (p. 323).

## Research method

Data was collected in two sequential phases: Phase 1 prior to college entry, Phase 2 after completion of the first year of college. The intent was to 'validate or expand quantitative results with qualitative data' (Creswell and Plano Clark, 2007, p. 62). No priority was given to either quantitative (QUAN) or qualitative (QUAL) data collection or analysis, both were integrated into the research process from the beginning and were collated and analysed concurrently. The findings of both data sets were converged during the interpretation phase, and integrated into the discussion. A visual diagram of Phase 1 procedure was constructed to illustrate the research design (Figure 2).



Figure 2. Visual diagram of Phase 1 QUAN and QUAL procedures





## **Ethical considerations**

Ethical guidelines for postgraduate researchers in the School of Education were consulted and an Ethics Review Checklist was completed in January 2011 and submitted to the Ethics Committee, School of Education, University of Dublin Trinity College. Approval was granted by the Director of Research on the 26th January 2011. Guidelines provided by the Children's Research Centre, Trinity College Dublin, the Psychological Society of Ireland, the British Psychological Society and the British Educational Research Association were also consulted. Whilst participants in this study were aged over 16 years the above principles were considered throughout the research as being reflective of good practice.

An explanation of the purpose of the study and ethical information is provided in the first page of the internet survey, together with consent to participation and ethical guidelines. A letter of introduction, code of ethics and consent form were also provided on the website and were available for consultation at all times. Participants were assured that whilst data from surveys used for the research study would not remain confidential, it would be anonymized using a numerical ID. Contributors to the discussion forum were reminded that postings were submitted in the public domain; they were advised not to identify themselves or others through user names or content of submissions.

## Data collection and analysis

The website was formally launched on the 4th April 2011 and applicants / stakeholders were sent an email inviting them to access and use the website resources, and to participate in the stakeholder surveys. The target population was recruited from CAO applicants to Trinity College who had indicated a disability on the application form (n=936). Other stakeholder populations were recruited from disability and community groups (n=63), national bodies such as the Department of Education and Skills, the National Disability Authority, and the Special Education Support Service (n=108), and secondary schools and colleges of further education (n=185). Letters of introduction to the website were mailed to individual guidance counsellors across the country (n=463).

### **Quantitative data**

Both quantitative and qualitative data were collected using surveys embedded in the web site. Separate surveys were written for students, parents / carers and practitioners within the field of education. 'Practitioners' includes professional stakeholders in the educational process such as psychologists, teachers and policy makers. The surveys were delivered via a professional SurveyMonkey account with links embedded in the Pathways to Trinity homepage. The account includes the facility to export and analyse numeric data to SPSS. Surveys were piloted to determine ambiguity, clarity and length of completion and some questions were subsequently revised.

Statistical data on web site traffic was collected through Google Analytics, an enterpriseclass web analytics solution that provides added insight into the analysis of website traffic. McGuckin and Crowley (2010) discuss the potential of GA as an effective resource for measuring the impact of academic research output and understanding the geo-demographics of users of specific web 2.0 content.







## Qualitative data

The Pathways discussion board is a forum for text submissions around five themes: general questions regarding applying to college, courses etc.; disability related discussions permitting members to share experiences, activities and advice which may be disability specific; disability service supports, in which members may post questions about college supports; transition from school to college, a section for contributing ideas about improving transition practices; and queries specific to the DARE process. Qualitative procedures entailed discourse and content analysis of a text corpus from the surveys, individual interviews, and submissions to the discussion board. The method of text analysis used was a summary protocol process, which identifies significant content and where important text is reported as verbatim. Thematic coding and categorization involves the inductive development of categories, meaning that the criteria for text analysis is developed from theoretical knowledge of the issues at stake, the research questions, and the text itself (Mayring, 2000).

## Analysis and discussion

### Survey data

Between 4 April and 1 July 2011 a total of 26 students and 6 parents submitted responses to the surveys. No responses were submitted from practitioners in the second level system. It should be noted that not all participants responded to every question. Complete data (tables and charts) is provided in the Appendices.

Whilst 65.4% of student respondents were identified as having a hearing impairment, this is likely a consequence of a paper version of the internet survey made available to 17 hearing impaired students attending the Trinity Deaf Summer School. However it is note that no additional descriptive comments were provided by these respondents, possibly due to concerns around anonymity. Two factors are discussed here: access to and quality of advice, information and guidance on related to the transition process, from a practical and personal perspective.

The most frequent source of advice on applying to college was provided by parents (16.4%) and guidance counsellors (16.4%), the Disability Access Route to Education (DARE) website and printed materials (14.9%), the college website (11.9%) and friends (11.9%). Similarly disability specific advice was accessed via DARE (16.4%), guidance counsellors and parents (9%), and college disability services and resource teachers (6%). Sources of information on the practicalities of being a student with a disability in college were identified as DARE (11.9%), and class teachers, friends, parents and college disability services equally (6%). This suggests that providing a dedicated college web resource that targets all stakeholders in the transition process, is a viable strategy for providing access to transition information.

Quality of advice that students received was measured across 12 variables associated with successful transition:







- knowing your strengths and weaknesses
- choosing Leaving Certificate subjects and college courses
- selecting a college
- getting supports in college
- applying to the CAO and DARE
- applying for a language waiver
- living, independence and skills
- finding accommodation

Satisfaction ratings ranged from Excellent to Good across most of the above with one notable exception. Advice on applying for a language waiver was rated as 'none' by 42.1% of respondents, these being hearing impaired students. This is an area of concern for two reasons: firstly because granting of a language waiver is provided to students who are Deaf or hearing impaired, specifically in recognition of language difficulties affecting performance in the Leaving Certificate; and secondly because students with sensory disabilities as a group are under-represented in higher education.

### Survey and discussion board comments

Comments from survey responses and discussion board postings were themed into three areas: barriers to successful transition, factors for successful transition and quality of access to information and advice.

Barriers to successful transition:

Lack of help from individual teachers in school.

*I would say lack of information. Perhaps at a guess, slowness of people, especially young people to go about accessing information for a variety of reasons. self-esteem, identity issues.* 

*Complications in accessing relevant info. Confidentiality issues. Secondary school environment in general, hard for students to approach teachers for many and complex reasons, therefore not used to approaching staff .* 

I'd say social issues would be the main barrier, self esteem, one's place in 'the group', fear of rejection, 'being different', that sort of thing. Therefore, college would need to work hard to access students with potential difficulties, as I believe average student would be slow to access help, even if it was available and useful to them.

Ignorance, lack of understanding.





Important factors for successful transition:

As we have just discovered that our son has Dyslexia and ADHD we really have no idea and would love some advise on what is available to him and how we can help him achieve his goals.

Clear guidelines and advice from Guidance Counsellors.

To know that there is somebody to talk to in confidence who is educated and has experience in dealing with student's problems, and who can differentiate various challenges students can have.

Information. Information . Information and one to one support.

Quality of access to information / advice:

Only recently have we had help from school regarding information... but the help we are getting now is 'very good' from the guidance counsellor, first person in school to show and share some knowledge regarding stresses associated with extra challenges that students can have.

We were very disappointed with the level of advice we were given. We searched the internet for answers to questions. However, the Disability Officer in TCD was the most informative and gave us a clearer understanding.

I feel the system is severely flawed and feel exhausted and de-motivated by the second level education system through repetitively proving my disability, only for the results to be ignored with no explication.

Comments and postings indicate that access to quality information at school level needs to be addressed as this is a source of frustration for parents and students. In particular a strategy that encourages self-awareness, self-determination and self-advocacy on the part of the student is of vital importance.

### Web statistics

Reports from Google Analytics were generated for the preliminary research period 4 April 2011 (web launch date) and 1 July 2011 (close of CAO application 'change of mind').

As expected the majority of visits were located within the Dublin region, with otherwise a reasonable national spread with the exception of the north-west area of the country.







The top ten key word searches indicate that stakeholders are identifying the DARE as a prime information factor. The use of 'pathways' as a keyword suggests that visitors have pre-identified this as a relevant term.

The most popular page views were identified as successful transition, advice in choosing a course, help with Leaving Certificate study, provision of supports in college, and a page describing the transition planning tool. This latter is of interest as the planning tool is an initiative that will be piloted in October 2011 and has not been widely advertised. This would suggest that assistance with planning transition via a dedicated reliable and valid tool is of interest as part of the transition process.

## Future practices and research

These preliminary findings have identified a number of short, medium and long term goals for improving practice and further research studies:

- Maintain the website, surveys and discussion board as a longitudinal research strategy;
- Begin Phase 2 of the research study which involves tracking the progress of incoming students and reviewing their experience of transition at the end of their first college year, will begin in September 2011.
- Develop a model of pre-entry transition assessment and planning;
- Identify gaps in resources and processes in providing for such a model;
- Encourage and promote the collaboration of students, parents and community groups, and policy makers.

The above goals are targeted in the Disability Service Outreach, Transition, Retention and Progression Plan 2010 – 2013, which aims to develop clear and effective support systems at all stages in the student journey from college entrance to graduation to employment. The stages of the Higher Education journey are: Phase 1 Pre-entry, admission and the first year experience, Phase 2 Building and maintaining a college career, and Phase 3 Progressing through College to employment.

The preliminary findings from the Pathways to Trinity web strategy have informed the objectives for the first part of the student journey which include two disability access initiatives beginning in October 2011: the Pathways Outreach Project and the Pathways Transition Tool.

### Pathways Outreach Project

Trinity has a long tradition of nurturing partnerships between schools, parents and the wider community in an effort to improve educational opportunities, to encourage educational aspirations, and to promote the transition from school to college. This pilot programme seeks to engage students with disabilities during their final two years of school by providing college-based workshops across the academic year. The





programme provides students with the opportunity to explore topics such as assistive technology, academic skills, self-determination and self-advocacy, independent living, and planning a college career. Parents and practitioners are encouraged to engage in workshops which provide advice on applying to the DARE scheme, supporting students through state examinations, and setting up a study environment. All participants in the workshop are introduced to the Pathways Transition Tool, a resource that can be used to track transition progress over their senior years of school.

## Pathways Transition Tool

Students with disabilities should be assisted with planning and recording the steps in the transition process, adapting their goals and needs as they progress through their school career, and reviewing such goals collaboratively with a transition 'partner', be that a parent, teacher, guidance counselor or other practitioner. The Pathways Transition Tool is a web-based assessment and planning resource structured into five modules: Preparing Myself for the Future, Independent Living, Academic Skills, College Application and Course Choices, and Identifying Reasonable Accommodations. The transition web tool will be piloted during the academic year 2011 – 2012 for public dissemination later in 2012.

### **Biographies**

**Alison Doyle** is a Disability Officer in Trinity College Dublin and is responsible for the Trinity supplementary admissions procedure for student with disabilities and the 'Pathways' Disability Access programmes.

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**Dr Michael Shevlin** is Director of Teaching and Learning (Undergraduate) in the School of Education, Trinity College Dublin and Co-director of the Inclusion in Education and Society Research grouping in Trinity College Dublin.





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## **APPENDICES: SURVEY DATA**

## **APPENDIX 1: Demographics**

#### Primary Disability

-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	ADD / ADHD	1	3.8	3.8	3.8
	Deaf / HoH	17	65.4	65.4	69.2
	Dyspraxia / DCD	1	3.8	3.8	73.1
	Mental Health	1	3.8	3.8	76.9
	Physical	2	7.7	7.7	84.6
	SpLD	3	11.5	11.5	96.2
	SOI	1	3.8	3.8	100.0
	Total	26	100.0	100.0	

#### Secondary disability

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No response	21	80.8	80.8	80.8
	Dyspraxia / DCD	2	7.7	7.7	88.5
	Medical	1	3.8	3.8	92.3
	SpLD	2	7.7	7.7	100.0
	Total	26	100.0	100.0	







## APPENDIX 2: Advice providers

College advice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	DARE	10	14.9	14.9	14.9
	SENO	3	4.5	4.5	19.4
	Guidance counsellor	11	16.4	16.4	35.8
	Resource teacher	2	3.0	3.0	38.8
	College website	8	11.9	11.9	50.7
	Principal	2	3.0	3.0	53.7
	Class teacher	7	10.4	10.4	64.2
	Parents	11	16.4	16.4	80.6
	College Disability Service	2	3.0	3.0	83.6
	Friends	8	11.9	11.9	95.5
	Nobody	1	1.5	1.5	97.0
	Other	2	3.0	3.0	100.0
	Total	67	100.0	100.0	







College advice



#### Disability advice

	30-			Frequency	Percent	Valid Percent	Cumulative Percent
		Valid	DARE	11	16.4	28.2	28.2
			Guidance counsellor	6	9.0	15.4	43.6
			Resource teacher	4	6.0	10.3	53.8
	20-		College website	3	4.5	7.7	61.5
rcen			Class teacher	4	6.0	10.3	71.8
Pe			Parents	6	9.0	15.4	87.2
	10-		College Disability Service	4	6.0	10.3	97.4
			Friends	1	1.5	2.6	100.0
			Total	39	58.2	100.0	
		Missing	System	28	41.8		
	L	Total		67	100.0		







Disabili	ty ad	vice

			Frequency	Percent	Valid Percent	Cumulative Percent
	25 Valid	DARE	8	11.9	24.2	24.2
		SENO	1	1.5	3.0	27.3
	20	Guidance counsellor	3	4.5	9.1	36.4
		Principal	1	1.5	3.0	39.4
Ħ	15	Class teacher	4	6.0	12.1	51.5
ercel		Parents	4	6.0	12.1	63.6
ē.		College Disability Service	4	6.0	12.1	75.8
		Friends	4	6.0	12.1	87.9
		Nobody	3	4.5	9.1	97.0
	5	Other	1	1.5	3.0	100.0
		Total	33	49.3	100.0	
	<sup>C</sup> Missing	System	34	50.7		
	Total		67	100.0		

#### Being a disabled student in college





APPENDIX 3: Quality of advice

## Frequency Table

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very good	9	47.4	60.0	60.0
	Good	5	26.3	33.3	93.3
	Poor	1	5.3	6.7	100.0
	Total	15	78.9	100.0	
Missing	System	4	21.1		
Total		19	100.0		

#### Knowing strengths

Choosing	10	sub	iocte
Choosing	LC	Sub	jects

_		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	2	10.5	11.8	11.8
	Very good	8	42.1	47.1	58.8
	Good	5	26.3	29.4	88.2
	Fairly good	1	5.3	5.9	94.1
	None	1	5.3	5.9	100.0
	Total	17	89.5	100.0	
Missing	System	2	10.5		
Total		19	100.0		





#### Choosing college course

**13t** 

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	3	15.8	15.8	15.8
	Very good	10	52.6	52.6	68.4
	Good	4	21.1	21.1	89.5
	Poor	1	5.3	5.3	94.7
	None	1	5.3	5.3	100.0
	Total	19	100.0	100.0	

5	Selecting	j a colleg	e

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	4	21.1	23.5	23.5
	Very good	10	52.6	58.8	82.4
	Good	1	5.3	5.9	88.2
	Fairly good	1	5.3	5.9	94.1
	Poor	1	5.3	5.9	100.0
	Total	17	89.5	100.0	
Missing	System	2	10.5		
Total		19	100.0		

#### Getting suports in college

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	1	5.3	7.7	7.7
	Very good	7	36.8	53.8	61.5
	Good	2	10.5	15.4	76.9
	Fairly good	2	10.5	15.4	92.3
	None	1	5.3	7.7	100.0





Tota	al 13	68.4	100.0	
Missing Syst	tem 6	31.6		
Total	19	100.0		

### Applying to CAO

-		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	4	21.1	25.0	25.0
	Very good	8	42.1	50.0	75.0
	Good	3	15.8	18.8	93.8
	Fairly good	1	5.3	6.3	100.0
	Total	16	84.2	100.0	
Missing	System	3	15.8		
Total		19	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	9	47.4	52.9	52.9
	Very good	6	31.6	35.3	88.2
	Good	1	5.3	5.9	94.1
	Fairly good	1	5.3	5.9	100.0
	Total	17	89.5	100.0	L
Missing	System	2	10.5		
Total		19	100.0		

### Applying for a LW

Frequency	Percent	Valid Percent	Cumulative Percent
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Valid Excellent Very good Good Fairly good	2			
Very good Good Fairly good	2	10.5	14.3	14.3
Good Fairly good	1	5.3	7.1	21.4
Fairly good	1	5.3	7.1	28.6
	2	10.5	14.3	42.9
None	8	42.1	57.1	100.0
Total	14	73.7	100.0	
Missing System	5	26.3		
Total	19	100.0		

#### Living skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	1	5.3	6.7	6.7
	Very good	6	31.6	40.0	46.7
	Good	3	15.8	20.0	66.7
	Fairly good	2	10.5	13.3	80.0
	None	3	15.8	20.0	100.0
	Total	15	78.9	100.0	
Missing	System	4	21.1		
Total		19	100.0		

#### Finding accommodation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Very good	4	21.1	26.7	26.7
	Good	2	10.5	13.3	40.0
	Fairly good	3	15.8	20.0	60.0
	None	6	31.6	40.0	100.0
	Total	15	78.9	100.0	





Missing System	4	21.1	
Total	19	100.0	

#### Social skills

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	2	10.5	13.3	13.3
	Very good	9	47.4	60.0	73.3
	Fairly good	1	5.3	6.7	80.0
	Poor	1	5.3	6.7	86.7
	None	2	10.5	13.3	100.0
	Total	15	78.9	100.0	
Missing	System	4	21.1		
Total		19	100.0		

Being	inde	pendent

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Excellent	2	10.5	14.3	14.3
	Very good	7	36.8	50.0	64.3
	Good	1	5.3	7.1	71.4
	Fairly good	2	10.5	14.3	85.7
	None	2	10.5	14.3	100.0
	Total	14	73.7	100.0	
Missing	System	5	26.3		
Total		19	100.0		





APPENDIX 4: Google Analytics



This country/territory sent 1,274 visits via 38 cities

Site Usage							
Visits         Pages/Visit           1,274         2.97           % of Site Total:         Site Avg: 2.88 (3.43%)	Avg. Time on Site 00:02:17 Site Avg: 00:02:11 (4.11%)	% New Visits 56.51% Site Avg: 59.20% (-4.53%)	Bounce Rate 49.06% Site Avg: 50.97% (-3.75%)				

### Search sent 624 total visits via 451 keywords

Site Usage							
Visits 624 % of Site Total: 41.74%	Pages/Visit 2.66 Site Avg: 2.88 (-7.40%)	Avg. Time on Site 00:01:49 Site Avg: 00:02:11 (-16.81%)		% New Visits 42.47% Site Avg: 59.20% (-28.26)	Bounce 54.49 Site Avg 50.97	Bounce Rate 54.49% Site Avg: 50.97% (6.90%)	
Keyword		Visits	Pages/Visit	Avg. Time on Site	% New Visits	Bounce Rate	
dare		18	3.22	00:01:34	33.33%	55.56%	
tcd		14	3.43	00:05:45	7.14%	28.57%	
www.tcd.ie/pathways-to-t	trinity	14	4.07	00:03:16	42.86%	35.71%	
trinity		11	3.45	00:01:07	9.09%	45.45%	
trinity college dublin		9	6.22	00:06:55	11.11%	22.22%	
pathways to trinity		8	5.50	00:05:00	37.50%	0.00%	
pathways tcd		7	2.14	00:00:14	0.00%	28.57%	
disability		6	3.33	00:00:38	83.33%	50.00%	
erasmus blog		6	1.67	00:00:28	100.00%	66.67%	
language waiver		6	1.83	00:01:52	33.33%	50.00%	





## 47 page titles were viewed a total of 4,300 times

## Content Performance

Pageviews 4,300 % of Site Total: 100.00%	Unique Pageviews 3,431 % of Site Total: 100.00%	Avg. Time on Page 00:01:10 Site Avg: 00:01:10 (0.00%)	Bounce Rate 50.97% Site Avg: 50.97% (0.009	% Exit 34.77% Site Avg: 34.77% (0.00%)	£ Index \$0.00 Site Avg: \$0.00 (0.00%)
Page Title		Pageviews	Pageviews	Pagev	iews
Pathways to Trinit Dublin, The University	ty : Trinity College rsity of Dublin, Ireland	1,261	29.33%		34.51%
<ul> <li>How can I transition application - Path College Dublin, The Ireland</li> </ul>	on successfully? - My ways to Trinity : Trinity he University of Dublin	320	7.44%		
My course choice Trinity College Du Dublin, Ireland	- Pathways to Trinity : blin, The University of	272	6.33%	6.33%	
Can you help with application - Path College Dublin, Th Ireland	LC study? - My ways to Trinity : Trinity he University of Dublin	191	4.44%	7.44%	29.33%
<ul> <li>What supports co campus - Pathwa College Dublin, Ti Ireland</li> </ul>	uld I have? - My life or ys to Trinity : Trinity he University of Dublin	160	3.72%		
Transition Plannin Trinity : Trinity Co University of Dubl	ig Tool - Pathways to llege Dublin, The in, Ireland	148	3.44%		

