

AN EVALUATION OF AN INTRODUCTORY MODULE TO SUPPORT STUDENTS WITH THE TRANSITION TO IRISH HIGHER EDUCATION

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Authors Declaration

I hereby certify that this material, which I now submit for assessment on the programme of study leading to the award of Doctorate of Education is entirely my own work, that I have exercised reasonable care to ensure that the work is original and does not to the best of my knowledge breach any law of copyright, and has not been taken from the work of others save and to the extent that such work has been cited and acknowledged within the text of my work.

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Abstract

An evaluation of an introductory module to support students with the transition to Irish Higher Education

The transition from post primary to Higher Education in Ireland can be the most challenging undertaken by students on their educational journey. Wintre and Yaffe (2000, p. 10) point out that “as students transition from the support frameworks of schools, they commonly find it difficult to manage the level of autonomy and flexibility which comes as part of the higher education environment”. This transition is complex and multidimensional. This research study examines how one element of the support system that Higher Education Institutions can provide i.e. a dedicated module that introduces students to the academic and broader skills required for success in their new academic journey and beyond.

Taking a mixed methods approach within the philosophical framework of pragmatism, the research gathers perspectives from both students who have undertaken the module in the Business Schools of three Irish Higher Education Institutions and academic staff who were either drivers of the adoption and/or involved with teaching the module. In addition, the research examines students’ perceptions of ‘mindset’, as outlined by psychologist Professor Carol Dweck (2008).

The main findings of the research project conclude that concerns with the adequacy of the Leaving Certificate programme plus the implementation of Government Policy were the main drivers for the adoption of a dedicated module to support transition. Also, it was discovered that student’s views of the module are positive, with 70% rating their overall experience of the module as ‘good’ or ‘excellent’. It is of note that students do not fully appreciate the benefits of the module until later in their studies. Confidence gained from undertaking presentations and the value of group/team work were perceived as the best aspects of the module. A more specific and targeted integration with other modules across the curricula is seen as the main area for enhancement. Student views of self-theories were positive, with 83% having either ‘a strong growth’ or ‘growth mindset’.

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"It does not matter how slowly you go as long as you do not stop" - Confucius.

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Glossary of Acronyms

CAO – Central Applications Office

CEB – Curriculum and Examinations Board

DES – Department of Education and Skills

ECTS – European Credit Transfer System

HE – Higher Education

HEA – Higher Education Authority

HEI – Higher Education Institutions

HPAT – Health Professions Admission Test

IoT – Institute(s) of Technology

IoTI – Institute of Technology Ireland

IUA – Irish University Association

ISSE – Irish Survey of Student Engagement

KPI – Key Performance Indicator

NCCA – National Council for Curriculum and Assessment

NFETL – National Forum for the Enhancement of Teaching and Learning in Higher Education

NFQ – National Framework of Qualifications

NSSE - National Survey of Student Engagement

QQI – Qualifications and Quality Ireland

RGAM – Recurrent Grant Allocation Model

SEC – State Examinations Commission

THEA – Technological Higher Education Association

Chapter 1 – Introduction

1.1 Introduction

There is much evidence, such as that contained in The Hyland Report (2011), The Department of Education and Skills Reports (2013, 2011) and The Economic Social Research Institute (ESRI) research publications (2014, 2011) to provide a strong argument that the Leaving Certificate programme within the post-primary education system in the Republic of Ireland represents inadequate preparation in terms of developing the skills and competencies required for subsequent successful academic engagement in Higher Education (HE). In support of the contention that preparation for the Leaving Certificate examination focuses almost exclusively on rote learning, with the instruction being teacher led, a meeting of the Joint Oireachtas Committee on Education in December 2010 concentrated specifically on the transition from second-level to third-level education. Several speakers said that the Leaving Certificate, with its emphasis on rote learning, left students ill-equipped to meet the challenges at third level (Hyland 2011). It is generally acknowledged that students memorise prepared essays and answers, based on predictions that certain topics will appear on the examination paper (DES 2013). In research carried out by the National Forum for the Enhancement of Teaching and Learning in Higher Education (NFETL) that examined transition to Higher Education in an Irish context, it is suggested “that this legacy of the Leaving Certificate examination leads to transitional issues for students who may not be accustomed to utilising the generic skills required for critical thinking and self-directed learning which are required at higher education” (Denny 2015, p.17).

As we shall see the literature indicates that the current approach to second level education in Ireland constitutes insufficient preparation for the transition to Higher Education, where the focus immediately shifts to independent learning and significantly less teacher-led instruction. Lecturers generally do not check that students attend class or do the homework necessary to keep up with a demanding study programme at this more advanced level. As a result, many students struggle on progression to Higher Education. While this research project focuses on the academic dimension of the transition process, a broad cohort of factors that influence student adaptation to Higher Education is also cited in the same context.

Factors such as making friends, moving away from home, family background, difficulties finding accommodation, financial concerns and operating in an unfamiliar environment are seen to have a significant impact on students (Thomas 2002; Zepke 2005). In addition, the organisational realities of Higher Education often involve students having fewer direct class contact hours, significantly more freedom, unfamiliar assessment techniques, large class sizes, a timetable with substantive 'gaps' during the day (and in some cases lectures on only one or two days per week), and possibly certain lecturers who are more committed to research than teaching. The fact that some academic staff are not really interested in teaching first-year students also adds to the pressures (McInnis 2000, Porter 2006; Yorke 2007). All of these factors, as Tinto (1975, 1994, 1998) and others suggest, may contribute to students struggling in a Higher Education environment. There is a significant amount of literature regarding this area. Among the most cited authors, apart from Tinto who has been writing on the topic since the early 1970s, are Kuh, Coates, Thomas and Yorke. A further example of the extensive research conducted in this field is 'The first-year experience: a review of literature for the Higher Education Academy in the UK' by Harvey et al. (2006). This review mentions 750 publications examined for the report in the context of the points referenced above. The review concludes that "the key factors in ensuring progression appear to be: personal goal setting and motivation; family and friends; paid work and financial situation; peer support; institutional habitus; cultural capital; prior information and choices; expectations; satisfaction; teaching and learning process and engagement with teachers; assessment and discussion of progress" (p.11). It is further suggested that "an expansion of higher education has led to an increased requirement to support the diverse student population, a possible reason for an increasing concern with the first-year experience" (p.7). Many Higher Education Institutions (HEIs) have established mechanisms, such as a suite of student services, to support the aforementioned challenges faced by students.

It can be argued that transition to Higher Education is multidimensional with the contributory factors being diverse and situational. This doctoral research project seeks to examine one specific element, focused developmental modules designed to support student adjustment to Higher Education. Within an Irish context, the deployment of a transition-related module(s) for such a purpose is a relatively new development. They have, however, a much longer history within the UK, US and Australian systems. In the literature, such elements are often

referred to as 'study skills' modules. In an Irish context, the modules cover a range of topics and would normally not be restricted to areas traditionally associated with 'study skills'. The literature (Harvey et al. 2006) supports the view that students need help in adapting to university life and becoming independent learners. There is also an affirmation that feeling positive and having a friendship group greatly aids social and emotional adjustment to Higher Education. While there is extensive research in this field within an international context (in particular the UK, US and Australia), there has been little research done in this area in an Irish context. Hence, the rationale for this research project which aims to contribute to filling the current void.

1.2 Research Aim

The aim of this study is to investigate the rationale for and to evaluate the value to students of the module(s) designed to support their transition to Higher Education, as adopted by Business Schools in Irish Higher Education Institutions (HEIs).

The research aim will be achieved by exploring students' views of the module(s) and their feedback regarding particular aspects of same that may have impacted on their development, together with incorporating their views on self-theories, as outlined by Dweck (2012). The justification for the implementation of such modules and the views of academic staff on the Leaving Certificate programme as a suitable preparatory mechanism towards a smooth adjustment to Higher Education are also examined. The final aspect of the research will be to develop 'good practice' guidelines for academic staff delivering the module(s) and provide guidance to Higher Education Institutions considering a similar-type implementation. The research focuses on the Business Schools within three Higher Education Institutions which have adopted such an approach. Two of the Business Schools are in the Institute of Technology sector and the third is University based; this approach was selected in order to incorporate a comparative aspect to the study.

1.3 Research Questions

The questions which the research seeks to address with specific reference to the transition-related module(s) are as follows:

- 1) What is the rationale for Higher Education Institutions introducing transition-related developmental module(s), and how do such institutions view the Leaving Certificate

programme as an appropriate preparatory mechanism for students who progress to Higher Education?

- 2) What are students' overall perceptions of the transition-related developmental module(s), as well as their views on engagement and the learning activities undertaken? The contribution which the module(s) has made to their knowledge and development, including the aspects of the content that they enjoyed and the aspects that could be enhanced, is also explored.
- 3) What are students' views on self-theories within an academic context?
- 4) How do academic staff delivering the transition-related developmental module(s) regard the role, and what recommendations (if any) would they make to a HEI considering the introduction of a similar initiative?

1.4 Background to the Study

In 2011, the Irish government published the 'National Strategy for Higher Education to 2030' which made two recommendations related to the area of transition to third-level education. The first these, recommendation number 5, stated that

Higher education institutions should prepare first-year students better for their learning experience, so they can engage with it more successfully (p.18).

The second (recommendation number 6), recommends that

Both undergraduate and taught postgraduate programmes should develop the generic skills needed for effective engagement in society and in the workplace (p.18).

To contextualise these recommendations, one needs to understand the mechanisms associated with accessing Higher Education in Ireland where third-level entry and the Leaving Certificate programme are intrinsically linked, but also completely separate. The linkage derives from Leaving Certificate student result grades being converted into a points score under a system operated by the Central Applications Office (CAO). The CAO points determine the study programme which a student will be offered in Higher Education and add a 'high stakes' dimension. Points rather than grades dominate the outcomes of the Leaving Certificate and have become an obsession among parents, students and teachers. In fact,

visitors to Ireland in early June and early August each year would be hard pressed to avoid the 'wall-to-wall' media coverage of both the Leaving Certificate examination (June) and the resultant CAO points (August). The majority of first-year students in Irish Higher Education progress directly from post-primary education based on their points score.

The Leaving Certificate programme has many critics as best summarised in the 2011 discussion paper by Professor Áine Hyland entitled 'Entry to Higher Education in the 21st Century'. Professor Hyland states that "concerns that the second level education system does not prepare students adequately for third level have been expressed with monotonous regularity during the past 50 years" (p.6). Discussions with regard to the transition to HE in an Irish context is generally framed around the CAO points required to gain entry to each study programme i.e. whether they are up or down from year to year; with little debate on the adequacy of the Leaving Certificate in terms of the most appropriate preparation for the challenges of HE which the student is likely to encounter. There are conversations among academic staff in various fora regarding issues with the Leaving Certificate programme and the associated examination. Yet, there are few analytical discussions with regard to steps that can or should be taken to overcome the deficits. The author suggests that HEIs need to address the shortcomings, rather than blaming both the Leaving Certificate programme and the current approach to teaching and learning in the post-primary sector. HEIs need to take responsibility for the shortcomings in the Leaving Certificate programme and establish and implement support mechanisms to assist students with progression to Higher Education. Such a view is supported by, among others, Thomas (2002) who maintains that

The empirical research suggests that relationships and positions are at the heart of student success; institutions must be willing to examine their internal structures of power and representation, including the spheres of governance, curricula and pedagogy. The responsibility for change is, therefore, laid squarely at the feet of the HE sector and institutions in particular; it is not acceptable to continue to blame new student cohorts because unless the institutional habitus is changed they will continue to be discriminated against (p.440).

As already referenced, some HEIs in Ireland have implemented developmental transition-related modules to support students in helping to overcome identified challenges. The intended aim of one such initiative, as stated in the module descriptor, is as follows:

This foundational module examines how to effectively manage your own learning and development throughout your time in HE. The focus is on harnessing and developing your academic skills and work strategies through informed self-awareness, goal setting, and action learning. Such skills include planning and decision making, team participation, communication, project management, critical thinking and the design and delivery of a business presentation - (extract site 3 in this research).

The topic areas covered in such a module include, but are not limited to, time management, self-management, presentation skills, working in teams, personal and academic development plans, developing critical thinking, learning styles, developing writing skills, and effective study skills. A review of the websites of the Business Schools of the 14 Institutes of Technology (IoTs) and 7 Universities in Ireland shows that ten IoTs and one University have implemented this type of module(s).

In recent years, there has been an increased emphasis on progression and retention within Irish Higher Education. The author maintains that this is directly related to the changes in the system used by the Higher Education Authority to fund Higher Education. The traditional block grant has been replaced by funding directly related to student numbers, which places a greater onus on HEIs to ensure that students progress on their journey through Higher Education. This research thesis deliberately steers away from linking the developmental modules with progression/retention, even though there is no doubt that they contribute to the overall picture. However, due to the fact that there are so many variables which can influence progression from year 1 to year 2 on any given study programme this aspect has been excluded from the current thesis. This decision is based on the assumption that it would have added an unnecessary complexity to the research project which would have impacted adversely on other elements. One example of such a complicating factor is the current methodology used to measure student progression. This involves recording the registered number of students in year one of a given course in March, as compared with year two of the same course the following March. The main issue with this methodology is that any student who withdraws in the first year of studies between September and March is not included within the progression/retention metrics. Any discussion on the merits or otherwise of progression/retention metrics is worthy of a separate research study deemed to be outside the scope of this project.

The author has a particular interest in supporting students within the IoT sector, many of whom come from lower socio-economic backgrounds and are the first in their family to attend Higher Education (ESRI, 2014). Additionally, some may have underperformed in previous academic endeavours. The author is a strong advocate of the opportunities that success in Higher Education can bring to students, having personally benefited from attending the IoT sector many years previously when there was little or no exploratory focus on transition, induction or teaching and learning. The area of student self-belief and confidence is often perceived as being overlooked, particularly within the IoT sector. Based on their experience of post-primary education, students within this sector may have negative perceptions as to their inherent academic abilities. It is perhaps presumed that perceptions would be more positive among University students; hence the desire to include both Institute of Technology and University students in this research study.

Evaluation (or the lack thereof) is a recurring theme in Higher Education. Each year, many innovations in terms of teaching and learning are implemented. Usually, intentions are highly laudable, and anecdotal evidence can be provided to justify such initiatives. However, there are few actual rigorous evaluations undertaken to support of assertions regarding the value to students of these innovative practices.

1.5 Rationale for Undertaking the Research

In seeking a suitable research topic, the author was conscious of the commitment required at doctoral study level. Consequently, he was eager to select a research area with a strong personal interest that would be sustained throughout the study and that would link to his role within the Higher Education (HE) sector. The author is employed in a senior management position (Dean of Faculty) in an institution within the Institute of Technology (IoT) sector in Ireland. Within the Faculty there exists a strong commitment to student retention with a focus on the student experience, in particular, in first year. That commitment includes the encouragement of innovation within the field of teaching and learning and assessment. The Institute introduced a transition-related module in September 2010 as a mandatory component in year 1, semester 1 for all students with the author one of the drivers of its adoption within the Business Faculty. The first semester is a standard twelve weeks in

duration and the module title was 'Learning to Learn' which was subsequently changed to read 'Learning and Development for Higher Education'. The module carries 5 European Credit Transfer System (ECTS) credits and aims to support students in their adjustment to becoming independent learners. It also seeks to underpin the students' personal and professional advancement by enabling them to develop essential skills. The content covers a range of topics, including learning styles, effective study skills, thinking and memory skills, writing skills, working in teams and presentation skills. The full syllabus including the assessment details is included in [Appendix A](#).

The module was introduced for two primary reasons firstly, to address the perceived deficits in students entering Higher Education directly from the post-primary system, in particular the lack of awareness of the requirements to become a self-directed learner. Many conversations had taken place in various fora, both formal and informal, at both Institute and Faculty level on the quality/ability of students entering the system directly from post-primary, in particular by comparison to peers from years back. Yet, no steps or action were taken to address these issues. The second reason was in response to the pending National Strategy for Higher Education to 2030, although not published at this point in time the recommendations had been widely leaked within the HE sector. The institute was keen where practicable to respond to the recommendations and the quinquennial programmatic review window in the academic year 2009/10 afforded the opportunity to address recommendation number 5 stated above.

As part of the year-one assignments for this doctoral programme, the author conducted a small-scale evaluation of the module. This appraisal proved invaluable in contributing both to this doctoral research and to the subsequent self-evaluation programmatic review required under the legislation that governs this sector. This was undertaken in the 2014/15 academic year which was a follow to the 2009/10 review referenced above. The literature review element of the year one assignment was particularly informative providing a strong evidence base identified in the next chapter as to the merits of modules that assist students with the transition to HE. On reflection the author would have ideally undertaken a far more extensive trawl of the literature and have engaged in a far more evidence based approach rather than the initial intuition based initial version of the module back in 2010. Thus in seeking a topic for the final doctoral thesis, this area offered much potential and appeal. The author was

aware that other HEIs had implemented similar developmental-type modules and that little research had been carried out in terms of assessing the module(s) particularly from a student perspective. Thus, he felt this area offered much potential to research what is still a relatively embryonic initiative within an Irish HE context.

The process of deciding to undertake doctoral level research was one that required a period of reflection that incorporated factors such as time available to study, in particular with the competing elements of a demanding role as a senior manager in HE, balanced against the commitments of a young family. One of the major factors in choosing this path was the metrics around the creation of a Technical University (TU). The National Strategy for Higher Education to 2030 mentioned above, suggests the possible creation of TUs based on criteria published subsequently. One of the criteria is that 45% of academic staff have a doctoral level qualification. The Faculty of which the author is Dean would have a percentage well below this metric. The institute where the author is employed has a strategic goal embedded in its strategic plan of becoming a TU. Thus, if this metric is to be increased the author required academic staff to undertake doctoral studies. The author believed that he had to demonstrate leadership by undertaking such a programme of study. He felt it would be unfair to ask academic staff to undertake such a programme of study that requires persistence, hard work and dedication, if he was not prepared to walk in their shoes and experience first-hand the highs and lows of this process. In addition, should the author in the future wish to seek higher level positions within a HE landscape with TUs, then a level 10 qualification will become a basic requirement. Other influences include a desire to continue his own lifelong learning journey that incorporated developing the skills required to complete doctoral level studies, in particular, in developing his academic writing and research competencies.

1.6 Outline of the thesis

Chapter 1 – Introduction

This chapter establishes a context for the research, outlines the aims and research questions, and provides the rationale and background for the study.

Chapter 2 – Literature Review

The main here is to identify and summarise key literature in this area. The section commences with a review of the Leaving Certificate programme as a preparatory process for subsequent studies and references the entry mechanisms to Higher Education in Ireland. There is also the mention of transition-related literature (both domestic and international), with a particular concentration on source material from the UK, US and Australia. Methods of study programme and module evaluation are explored, and the chapter concludes with the theoretical underpinning of the research i.e. self-theories (or increment theory) which hypothesise that students can develop to become more effective learners.

Chapter 3 – Research Methodology

This is one of the key elements of the research project, outlining the research aims and objectives before setting out the research approach and choices that framed the project. It notes a pragmatic philosophical focus, with a mixed methods approach. The data collection methods employed and challenges encountered are set out in detail, including the ethical considerations and data analysis tools and techniques utilised.

Chapter 4 – Analysis of Findings and Discussion

The chapter presents an analysis of the findings from both the quantitative and qualitative data collection instruments deployed throughout the study. Findings are discussed with reference to research questions and the relevant literature. Quantitative outcomes are presented using the data analysis tools of SPSS and Excel. The manual coding and theming of the open-ended qualitative questions on the questionnaire designed to assist in answering

the research questions are also featured. The qualitative material is assessed using adapted framework analysis.

Chapter 5 – Conclusions and Recommendations

The conclusions and recommendations section is designed to integrate the previous chapters in the context of the overall study aim, research questions and findings. In presenting the analysis, attention is given to the potential limitations of the research project, possible biases, and proposals for future research. Overall, the evaluative process inherent throughout the project is intended to facilitate HEIs which may be considering or have already adopted the student support mechanisms assessed and recommended in this thesis.

Chapter 2 – Literature Review

2.1 Introduction

This chapter aims to provide an outline of the literature associated with the area of transition to Higher Education and, in particular, the use of a HE module with specific aims and objectives. Creswell (2014, p.24) states that a literature review accomplishes several purposes:

It shares with the reader the results of other studies that are closely related to the one being undertaken. It relates a study to a larger, ongoing dialogue in the literature, filling in the gaps and extending prior studies. It provides a framework for establishing the importance of the study as well as a benchmark for comparing the results of other findings.

He offers advice which the author carefully followed on how to undertake a literature review, including the creation of a visual picture of the literature (p. 31) by outlining that:

There is no single way to conduct a literature review, but many scholars proceed in a systematic fashion to capture, evaluate, and summarise the literature.

The literature review investigates five main themes, commencing with a background before examining the Leaving Certificate programme and associated examination and entry mechanisms to Higher Education, together with a critique of same. It then explores the transition from post primary to Higher Education, both nationally and internationally. Next, methods of evaluation are explored. Finally, the theoretical underpinning of the current research project i.e. self-theories or incremental theory that hypothesise that students can develop to become better learners is examined.

2.2 Methods

The literature review was conducted using a variety of sources, in particular, the resources of the libraries of Athlone Institute of Technology and Dublin City University (both being accessed in person and online). In total, 15 databases were consulted to locate key books, articles and papers during the production of this structured Doctorate in Education thesis.

Books, published reports and academic journal articles are the main sources in terms of the literature cited. Keywords used in this search included ‘transition’, ‘introductory’, ‘study skills’, ‘generic’, ‘first-year’, ‘entity theory’, ‘incremental theory’ ‘self-theories’, ‘self-efficacy’, and ‘evaluation’. The inter-library loan system proved to be a valuable source of original textbooks held by HEIs across the UK and Ireland.

2.3 Background

The transition from post-primary to Higher Education is among the most challenging stages that students will undertake in their educational journey. The challenge arises from a range of factors, and the supports which HEIs provide en route is a key determinant of subsequent student success (or otherwise). Some students struggle with the concept of self-directed and independent learning, which is generally regarded as the norm in HE. Many commentators in Ireland lay this issue at the door of the Leaving Certificate programme plus examination and the backwash effect of what is called the 'points race' with a focus on a high-stakes terminal examination (Hyland, 2011). The government's National Strategy for Higher Education to 2030 makes reference to the belief that second-level education does not prepare students adequately for the adjustment to Higher Education and that HEIs should prepare first-year students more comprehensively and effectively for the new learning experience. Kantanis (2000) also posits the need for effective facilitation and support from HEIs to assist first-year student transition. He argues that the initial student experience is critical "Given an increasing need for support, the initial student experience in higher education is pivotal in establishing attitudes, expectations, motivation and approaches to learning" (p.101). Before examining the literature on transition in more detail, the next section will focus on the Leaving Certificate programme as the means of preparing students in Ireland for Higher Education.

2.4 Leaving Certificate programme

As previously mentioned, the Leaving Certificate is the final examination to mark the end of the Irish post-primary school system. The system has two elements: the Junior Cycle which spans 3 years, and the Senior Cycle of 2 years' duration (there is also an optional 'bridging year' called 'transition year' which is undertaken prior to the Senior Cycle. Pupils typically enter post-primary school at 12 years of age and leave at the age of 18. Thus, students spend a total of 5 or 6 years in post-primary education. The Leaving Certificate curriculum contains a total of 34 subjects with students' having the option of either Ordinary or Higher Level studies (although two subjects, Irish and mathematics, are available at Foundation Level also). Additionally, there is a separate Leaving Certificate Vocational Programme. Many in Irish society consider the Leaving Certificate as a 'rite of passage' in their overall personal development and conclude that the stress, anxiety and worry associated with the examination is a necessary part of growing up. Even now, in my late-40s, when discussing the Leaving Certificate programme with friends and colleagues, many claim to still have

unpleasant memories in relation to the examination process. A recent interview in the Irish Times with high-profile Irish actor, Cillian Murphy, notes his recurring dream: “in my school uniform, sitting at a desk and in the thick of the Leaving Cert all over again. I still have nightmares about it, even more so than walking on stage” (O’Brien 2017).

The focus on rote learning, the examination process, and the prediction of questions that might appear provides students with inadequate preparation for the transition to Higher Education (DES 2013). To quote a student from the 2014 ESRI research “teaching in schools focuses on how to learn to pass exams, whereas in higher education the focus is on learning how to become independent learners” (McCoy et al., 2014, p.9). A contradictory conclusion can be discovered on the website of the Department of Education and Skills’ where is stated that the Leaving Certificate programmes today emphasise

- the importance of self-directed learning and independent thought
- a spirit of inquiry, critical thinking, problem-solving, self-reliance, initiative and enterprise;
- preparation for further education, for adult and working life
- life lifelong learning (DES, p. 2).

Few students who transition to Higher Education have the above skills and attributes (DES 2011). Were they to possess them, there would be little or no requirement to introduce transition- related module(s) on the part of respective HEIs.

The Leaving Certificate programme is predominately assessed via a series of terminal, summative three-hour written examinations each June with a continuous assessment element being limited to languages or practical-based subjects. Students are required to take a minimum of five subjects, one of which must be Irish. Because the examination result is intrinsically linked to the entry mechanism for Higher Education, the level of media and general interest is strong, as already alluded to in the introductory chapter. This, at times, can border on hysteria. Each June, in advance of the examination, the media platforms (both traditional and new), provide an in-depth coverage of the examination for days in advance. Subsequently each day there is a dissection of what occurred that day, while making predictions for the questions on the next examination paper. This can be a deeply stressful time for both students and their parents. As referenced already, the currency of student performance is CAO points rather than the grade achieved in individual subjects in the Leaving

Certificate examination. When discussing and communicating the results, a student's performance is referred to accordingly.

2.4.1 Issues with the Leaving Certificate Programme

The Leaving Certificate programme has been the subject of much review and change since its introduction shortly after the foundation of the Irish State in 1922. There have been a number of key reports, either by the Department of Education and Skills (DES) or by governmental bodies linked to the DES, which examine the Leaving Certificate from a variety of perspectives. The following reports are listed as an aid to the reader:

- 'Supporting a better transition from Second Level to Higher Education: Key Directions and Next Steps (2013)' by the Department of Education and Skills (DES)
- 'Entry to Higher Education in Ireland in the 21st Century (2011)' by Professor Áine Hyland commission by the Higher Education Authority (HEA) and the National Council for Curriculum and Assessment (NCCA)
- 'From Leaving Certificate to Leaving School: A Longitudinal Study of Sixth Year Students (2011)' by Smyth et al. - commissioned by the Economic and Social Research Institute (ESRI)
- 'Leaving School in Ireland: A Longitudinal Study of Post-School Transitions (2014)' by McCoy et al. - commissioned by the Economic and Social Research Institute (ESRI)

Concerns that the second-level education system does not prepare students adequately for Higher Education have been expressed with monotonous regularity over the past 50 years. In 1963, a Labour Party Policy document entitled 'Challenge and Change in Education' stated:

Our present system of selection for the university is in urgent need of radical change. The failure of the present matriculation system on an intellectual level is shown by the fact that some 25% of first year students in the universities fail their first year examinations (Hyland 2011, p.8).

In 1967, the Commission on Higher Education stated that it had received evidence that Irish students were "ill-prepared for university studies and find it difficult to adjust themselves to university conditions". The report commented:

The low standard of entry is, we think, one of the reasons for the failure rate at first university examinations. ... at some first university examinations the percentage of those who fail at the first attempt may reach 40% or 50% the low entry standard, taken in conjunction with (these) circumstances, makes high initial failure rates almost inevitable (Hyland 2011, p.8).

In 1970, an analysis of the Leaving Certificate curriculum and the related assessment found fault with both. The authors of the report discovered that subject syllabi emphasised content to the detriment of skills and 'intellectual functioning'. The report was critical of the extent to which the Leaving Certificate examination influenced the student learning experience and stated:

For too long the cart has been before the horse; final marks (i.e. the marks achieved in final examinations) have been treated by society as the ultimate goal of education. Intellectual curiosity, the joy of discovery, involvement in intellectual issues – in a word, all these activities and responses which contribute to true learning have been subordinated to, often sacrificed to, a public examination. To restore things to their proper order is the most pressing problem in Irish secondary education at the present time (Hyland 2011, p.8).

In 1986, a report by the Curriculum and Examinations Board (CEB) on Senior Cycle was again critical of the Leaving Certificate programme and pointed out that the 'backwash effect' of the points system on teaching and learning at second level was detrimental and harmful to the quality of learning, not only of those progressing to third level but also for students who might wish to leave the education system on completion of second level. The report stated that senior cycle education should instil:

A sense of confidence, enterprise, creativity and achievement in students, as well as the capacity for self-directed learning and the ability to identify problems and to propose and implement solutions to them (Hyland 2011, p.8).

As Hyland notes in this report:

There have been ongoing changes in the Leaving Cert curriculum in recent decades, and according to the Department of Education and Skills' website, the Leaving Cert programme today 'emphasise the importance of self-directed learning and independent thought; a spirit of inquiry, critical thinking, problem-solving, self-reliance, initiative and enterprise; preparation for further education, for adult and working life and lifelong learning'. However, criticism by employers, the higher education sector, the media and the public suggests that Leaving Cert students do not focus adequately on these goals and that they do not achieve the skills required for higher education and for employment during senior cycle. Whether this arises from inertia within the second-level system or downward pressure from the points system is a matter for debate (Hyland 2011, p.9).

Other, more recent, commentators have publicly voiced concerns in many fora. The former President of Dublin City University, Professor Ferdinand von Prondzynski has commented as follows:

Here's the situation. We have a final secondary school examination that we all know isn't fit for purpose. It encourages learning methods that offend the most basic principles of

pedagogy. Its curriculum is outdated and hard to change to something better. By all accounts it fails to engage the interest and enthusiasm of either teachers or students. It doesn't attract any respect from the wider world, including the world of business. It has little impact internationally (von Prondzynski cited in Hyland 2011, p.9).

Speaking to Guidance Counsellors in August 2010, Professor Tom Collins, then interim President of the National University of Ireland Maynooth and chairman of the National Council for Curriculum and Assessment (NCCA) was particularly critical of the points system, stating:

There is growing anecdotal evidence that the system is no longer fit for purpose at third level either. There is a palpable concern in higher education regarding the capabilities and dispositions of students entering it straight from second level. The manner in which the points system rewards rote learning, instrumental learning and memorisation while simultaneously discouraging exploration, self-directed learning and critical thinking means that even relatively high achieving second level students can struggle on entering third level (Collins cited in Hyland 2011, p7).

In terms of the relevance of the issues raised to this research, the comments from the 1970 report titled a study of the Irish Leaving Certificate state that for too long the cart has been before the horse, in that Irish society judge marks in terminal examinations as the ultimate goal of education and that true learning has been subordinated to and often sacrificed to, a public examination. Comments some 40 years later by Professor Tom Collins are most pertinent. He notes the points system in rewarding rote learning, instrumental learning and memorisation while simultaneously discouraging exploration, self-directed learning and critical thinking can mean that even relatively high achieving second level students can struggle on entering third level. How can these issues be overcome, what changes are required to address these challenges?

2.4.2 Recent Debate of the Leaving Certificate Programme and Transition

The Leaving Certificate has been, and continues to be, the subject of much debate in both post-primary and Higher Education. The discussion has concentrated on two main aspects; the high-stakes nature of an examination associated with predictability and rote learning' and the level of preparedness of students for HE. The National Strategy for Higher Education to 2030 highlights the fact that many commentators are of the opinion that the LC does not provide adequate preparation for the requirements of studying in HE. The government has recognised this, and the Department of Education and Skills has engaged in a series of

discussions, debates, seminars and conferences around the area of transition. Such consultation has been led by the Higher Education Authority (HEA) and the National Council for Curriculum and Assessment (NCCA) and has included the commissioning of a report on the predictability in the examinations. The debate has been framed by the 2011 background paper mentioned above by Professor Áine Hyland, which contains a comprehensive overview of the key issues and offers suggestions regarding actions that potentially could be undertaken to address the concerns that have become the focus of recent debate in this area.

The stresses that students experience to their Senior Cycle schooling, and particularly in the final year, has been well-documented. In particular, the 2014 publication by the ESRI notes that students who experience higher stress levels in sixth year underwent more academic difficulties on transition to post-secondary school education. The research also examined the impact of stress on examination performance and noted that:

A third of the school leavers felt that they had been too nervous to do well in the exam, with this being more prevalent among young women (39 per cent compared with 26 per cent), again in keeping with the higher stress levels found among female students in sixth year (Symth et al. 2014, p.141).

Hyland also cites the link between the high-stakes nature of the stress which students experience and the approach to teaching and learning:

Because the Leaving Cert is a high stakes examination, used as it is for selection to higher education, its backwash effect on teaching and learning and on the student experience, especially in senior cycle, is considerable. The points system influences an individual student's subject choice; the examination becomes the determinant of what is studied and how; non-examination subjects get little or no attention and, in many cases, broader co-curricular activities are ignored or minimised. Student stress levels increase as the June examination looms and for some students their final year in school is an unhappy experience which they simply want to get through as quickly as possible (Hyland 2011, p.6).

The Economic and Social Research Institute (ESRI) has undertaken two research projects in this area that appraise the LC programme on a longitudinal basis both in post-primary and post-school transition to HE. In the research on the post-primary experience, it is stated that:

The study clearly indicates that, as currently structured, the Leaving Certificate tends to narrow the range of student learning experiences and to focus both teachers and students on 'covering the course'. Such a focus would appear to be at odds with the kinds of flexibility and critical thinking skills needed for young people to flourish in a constantly changing world. The findings therefore clearly point to the need to reassess the current Leaving Certificate model, by providing access to a broader range of teaching methods, embedding key skills such as critical thinking in the curriculum, and utilising a broader range of assessment modes, in order

to enhance student engagement and equip them with skills and competencies for their future lives. (Symth et al. 2011, p. 23).

These points are reinforced in a Department of Education and Skills report in March 2013 titled 'Supporting a Better Transition from Second Level' that refers to the:

Backwash effect on teaching and learning in senior cycle and even into junior cycle, combined with the fact of the stresses experienced by students on their learning experience and enjoyment of learning, has resulted in calls for changes that will improve the experience and allow time and space to develop a broader range of skills and competencies. However, any change and development that seeks to promote original thinking, or the ability to problem solve becomes controversial (in the case of project maths) or compromised by gaming of the system by students to beat the stakes (p. 6).

The report further sets out three key directions for action towards that necessary change.

- 1) A commitment to address any problematic predictability identified in an analysis of predictability in the Leaving Certificate examination;
- 2) A commitment to reduce the number of grading bands used in the Leaving Certificate examination;
- 3) A commitment to significantly reduce the number of programme offerings for a broader undergraduate entry to level 8 honours bachelor degree programmes in the universities and to review level 8 programme provision in the institutes of technology to ensure a mixed portfolio of programmes with denominated and generic entry (DES 2013, p. 2)

As the above extracts demonstrate, adjustment to the Leaving Certificate programme, as presently structured, is required, but such reform would represent a significant initiative on the part of the relevant Minister. A previous Minister for Education and Skills Ruairi Quinn TD, attempted to bring change to the Junior Certificate examination in a process that commenced in 2014. Outlining the justification for the proposals the Minister stated:

The current system is all about exams. The new JCSA or Junior Cycle Student Awards is all about students. I want to change the existing system, taking away an unnecessary high-stakes exam for 15-year-olds. I want to replace it with a system of teaching, learning, and assessment which liberates students and their teachers. We want our young people to develop skills like critical thinking, problem-solving, and communicating ideas. We want them to be creative, innovative, and engaged. We want to impart skills to them that they will be able to apply in their lives well beyond secondary school (Quinn 2014).

These reforms are finally being implemented three years later following extensive and at times challenging engagement with the relevant teacher trade unions. These reforms while not as extensive as originally proposed are to be welcomed in the context of this research and it can but be hoped that such changes, in particular, those that reference teaching, learning and assessment will be adopted in the coming years for the LC programme.

One of the actions set out in the DES report on supporting a better transition was a commitment to address any problematic predictability in the LC examinations. To this end the DES commissioned the Oxford University Centre for Educational Assessment and Queen's University, Belfast to undertake research into predictability in LC examinations. The research which was headed by Professor Jo-Anne Baird and published in 2014 found that "concerns about the predictability of the Leaving Certificate examination question content were not sustained by the findings of this research overall. None of the examinations was found to be very problematically predictable in these terms" (Baird 2014, p.27). This research was carried forward into subsequent study by the same team which reinforced the original findings but also suggested "that some level of predictability was essential for building a degree of confidence in what they were doing and how they might perform in the examination situation; it is not helpful to 'go in blind' and not to be prepared to some degree in what to expect (Elwood et al. 2017, p.14). These findings are welcome and debunk one of the commonly held beliefs with regard to the LC examinations.

2.4.3 In Defence of the Leaving Certificate Programme

Despite its many critics, the Leaving Certificate system is designed to be fair, equitable, transparent and much reform and evolution has taken place over the years. The National Council for Curriculum and Assessment (NCCA) has implemented reforms within the primary and post-primary sector since its statutory inception in 2001 and, prior to that for over 20 years as a non-statutory organisation. Many of the early criticisms of the Leaving Certificate have been addressed by the NCCA. Developments such as the Project Maths initiative which commenced as a pilot in 2008 and rolled out nationally two years later sought to change the Maths landscape in Ireland. The initiative, with an emphasis on skills development and, in particular, reasoning and problem solving, has started to impact how students engage with this subject in the classroom. The syllabus for individual subjects has been updated to incorporate a requirement for students to critically engage with subject content and to apply higher-order thinking skills. For example, the History syllabus is designed to challenge students to appreciate "the complexities inherent in the challenge of interpreting the past and making reasoned judgments based on an evaluation of evidence" (p.2). The aims of that particular syllabus included the "ability to think critically", "to develop an awareness of bias

and strive to be objective”, and “to evaluate one’s historical inheritance through the study of history from a variety of perspectives” (p.4). The objectives include the development of “research skills” and “skills in working with evidence” (p.4) which are of significant importance in Higher Education. However, not all syllabi have been updated. The Economics syllabus still dates from 1969, despite attempts having been made to implement amendments agreed in 2007. Due to a number of factors, such as a lack of funding, the relevant proposals have not been adopted. Another enhancement developed by the NCCA is the key skills framework initiative which is set out in detail later in this chapter and was developed in consultation with Higher Education and employer groupings. This aims to help learners to think critically and creatively, to innovate and adapt to change, to work independently and in a team, and to reflect on their learning (NCCA 2009). Performance in the Leaving Certificate remains a strong predictor of academic achievement in Higher Education as evidenced by the Hyland Report and the annual HEA report on progression in Irish Higher Education.

Successful studies carried out since the introduction of the points system indicate that the leaving certificate continues to be a reliable predictor of student performance in higher education. Research carried out on behalf of the points commission in the late 1990s, showed there was a clear relationship between leaving certificate attainment and performance in higher education. In general, students with high points tend to obtain higher grades and graduation. However, the relationship was not linear and various factors such as type of institution, field of study and gender had impact on performance. Results in mathematics in the leaving cert found to be a particularly good predictor of subsequent academic performance, regardless of the discipline chosen (Hyland 2011, p.17).

The most recent HEA progression report published in March 2017 reports first-year progression statistics from the academic year 2013/14 to 2014/15. The research finds that while the overall non-progression rate is 16%, this rises to 34% for students who attained lower-range CAO scores of between 255 and 300 points in the Leaving Certificate examination. Only 7% of students who obtained higher-range CAO scores of between 555 to 600 points did not progress to the following year of study (HEA 2017, p.39). The Leaving Certificate phenomenon is not unique when compared to high-stakes examinations in other countries that also have deemed it necessary to introduce modules to support the transition to Higher Education. What is different in an Irish context is the fact that these modules are a relatively recent development.

2.5 Entry to Higher Education

The Higher Education system in Ireland, in 2017, has broadly four elements, the Universities of which there are seven; the fourteen Institute of Technology; three colleges of education; and private colleges of which there are currently fourteen listed on the CAO. Thus, there are currently a total of 39 HEIs, both public and private, from which a learner may choose when selecting a preferred study option in Higher Education. The sector is dominated by the State-funded Universities and Institutes of Technology. Universities have been in existence in some case for hundreds of years, with the more recently established institutions being founded in the late 1980s and early 1990s. The Institutes of Technology were introduced in the 1970s to provide a much wider access to Higher Education in the regions of Ireland. Their original mandate was to educate for trade and industry over a broad spectrum of occupations (ranging from craft to professional), notably in engineering and science but also in commercial, linguistic and other specialities. The IoTs have developed and expanded since, with the massification of Higher Education in many cases associated with EU funding and the abolition of student tuition fees in the 1990s. They were originally called Regional Technology Colleges (RTC), and rebranded as Institutes of Technology (IoT) in the late 1990s. The IoTs have evolved from the original certificate and diploma study programmes to full awarding powers from certificate to doctorate (denoted as levels 6 to 10 on the National Framework of Qualifications (NFQ)). Universities tend to offer study programmes at levels 8 to 10 on the NFQ.

The IoTs have played a pivotal role in social and economic transformation in Ireland. In particular, their contribution to widening access and participation in Higher Education, in enabling a regional provision, and in supporting economic development in the regions is generally acknowledged. However, the binary system of a dual involvement of autonomous Universities on one hand, and, on the other the Institutes of Technology offering some degree courses under the auspices of a central accreditation body (Godwin, 1998) is maintained and strongly defended by the Universities. The IoT sector is often perceived as secondary to the more academic Universities in the minds of many families and employers. This, to some extent, is deemed to result from both the academic and socio-economic profile of students attending the IoTs. Points required for entry to University study programmes can be significantly higher than for those in IoTs, and the profile of student in the IoT sector is

generally lower both in terms of CAO points and socio-economic grouping (with, as already alluded to, many being the first in a family to attend Higher Education – a factor that can bring its own challenges). The HEA report on progression in Irish Higher Education (2011) notes the following:

Given the inequalities that persist in the extent to which different socio-economic groups derive benefit from second-level education in terms of school completion and in terms of the attainment of Leaving Certificate points, the lower entry requirement for most institutes of technology programmes results in contrasting socio-economic profiles among the students between the universities and institutes of technology (p.12).

The Leaving Certificate is operated by the State Examinations Commission which is a subset of the Department of Education and Skills. The CAO, the entity that manages the previously discussed points system is a company limited by guarantee i.e. it does not have share capital and is governed by a board of directors on behalf of all State-funded HEIs. The system operates on a classic economic supply and demand model; the points required for entry to any undergraduate study programme in HE is dependent on the number of applicants in relation to the number of places available. Thus, high-demand study programmes, such as medicine, with a relatively low number of places available, have high entry points as a result of there being a large number of applicants. There is a clear distinction for the majority of study programmes as between the points required for entry to Universities, IoTs, and other private providers. The most recent HEA progression report published in March 2017 illustrates a gap of 200 points between entrants at Level 6 into IoTs and Level 8 entrants to both Universities and other Colleges. The report shows that the most common points attained by Level 8 entrants in Universities and other Colleges in 2013/14 was in a range between 455-500, in comparison to a range of 355-400 attained by Level 8 entrants in the IoT sector. The report also demonstrates a clear difference between entry points on Level 6 and 7 programmes compared with Level 8.

Within the institute of technology sector alone in 2013/14, there is a difference of 100 most common points attained between entrants at level 6 and 7 (255-300 points) and entrants at level 8 (355-400 points) (HEA 2017, p. 14).

The grades that students achieve in Leaving Certificate subjects are converted into CAO points. The points are calculated based on the grading scale outlined in table 2.1 below.

Students may opt for higher or lower level examination papers in each subject, with the greater number of points attainable available for higher-level papers.

Leaving Cert Grade	Marks out of 100	Higher Paper	Lower Paper
A1	90 - 100	100	60
A2	85 - 89	90	50
B1	80 - 84	85	45
B2	75 - 79	80	40
B3	70 - 74	75	35
C1	65 - 69	70	30
C2	60 - 64	65	25
C3	55 - 59	60	20
D1	50 - 54	55	15
D2	45 - 49	50	10
D3	40 - 44	45	5
E	35 - 39	0	0
F	30 - 34	0	0
NG	0 < 30	0	0

Table 2.1 – Leaving Certificate points scoring grid (CAO, 2016)

Although there is no limit on the number of subjects which a student can take for the Leaving Certificate, the maximum number allowable in the context of the scoring system for entry to Higher Education is six. Thus, the maximum points that a student could potentially score was 600 points (6 grades at A1 in higher level papers) up until 2012. Following pressure from various interest groups such as employer groupings, a bonus of 25 points for attempting honours Mathematics was introduced for those sitting the LC examination in June 2012. Thus, the maximum points attainable is currently 625.

2.5.1 Critique of the Entry Mechanism/CAO Points System

The CAO points system or just the points system (as it is commonly referred to) has many critics. One of the main contentions offered is that the system is based on the performance of students in a series of terminal summative examinations over a three-week period in June of each year. It takes no account of extra-curricular activities or the life experience of candidates, as would be the case in many other jurisdictions such as the UK with the use of personal statements. As Professor Hyland outlined in her 2011 paper, students “tend to conflate the leaving certificate with the points system” (p.6). This is evident when they are asked about their Leaving Certificate results. Instead of stating the outcome in terms of subjects and grade levels achieved when these results are issued by the State Examination Commission, students usually respond to the question of “How did you get on in the leaving certificate”? with the reply, “I got X number of points”. During their Senior Cycle studies, students (advised by their parents and teachers) will do everything possible to optimise the potential points achievable. Some base their subject choice for LC on the perceived likelihood of getting a high grade, rather than an aptitude for the subject or its relevance to their preferable discipline in HE. Others will pick and choose topics within the syllabus, and exclude others, thus effectively truncating the content as a result of having checked whether the examination requires candidates to answer questions on all aspects of the syllabus or not. The increasing practice (by those who can financially afford it) of paying for private tuition in the form of ‘grinds’ during their final year in secondary school, further disadvantages students from lower socio-economic backgrounds who are not in a position to do so (ESRI 2014).

In September 2014, Trinity College Dublin sought to broaden the application process and undertook a pilot programme that factored in considerations such as extracurricular activities and life experience, as would be the case in many other jurisdictions (such as the US and UK). These factors plus CAO points were used for determining entry to a limited number of first-year study programmes. The process generated significant debate in the letters section of the Irish newspapers in the period 16 – 26 October 2014. In total, 13 letters were published under the heading of ‘TCD’s Alternative Entry Scheme’ and ‘Beyond the Points Race’. Below are some extracts from such letters, as published by the Irish Times. Those who wrote included Dr William R. Fitzsimmons, Dean of Admissions and Financial Aid at Harvard University, and

the former Chief Executive Officer of the CAO, John McAvoy, whose opinion article, had the emotive title 'Students as Guinea Pigs in Trinity's Experiment'

Since my retirement as general manager of the CAO 10 years ago, I have resolutely refrained from commenting on any matter concerning third-level admissions. However, I feel compelled to break my silence when I see Trinity College Dublin using students in an outrageous experiment (John McAvoy, former CEO of the CAO).

In his retort Dr Fitzsimmons opined:

Sir, - I was greatly concerned by the views expressed in a recent article 'Students are guinea pigs in Trinity's experiment'. I have been dean of admission and financial aid at Harvard for almost 30 years. During that time we – just like other major universities in the United States have used a holistic admissions system, involving many of the same elements Trinity is testing in this study. Far from being 'mumbo jumbo', and an arcane practice 'verging on voodoo', this approach is recognised as providing a more reliable way of admitting talented students who will excel in their studies and in all their endeavours during college and beyond.

Dr William R. Fitzsimmons, Dean of Admission and Financial Aid at Harvard University

In response to the debate on transition, the government published an updated 'Supporting a better transition from Second Level to Higher Education report' with an updated tag line of 'Implementation and Next Steps' in April 2015. The key tenet of the report was the announcement of a new CAO points scoring system effective from August 2017. The new system aims to simplify the scoring process by reducing the number of grade bands from 14 to 8. The maximum points score will remain at 625 (inclusive of bonus points). The most controversial aspect of the new scoring system is the awarding of points for a higher-level grade of H7. This innovation is intended to encourage more students to undertake higher-level papers by reducing the 'risks' associated with being assigned an E grade previously. Under the earlier system, this result would be considered a 'fail' as the raw score was below 40% which would not attract any CAO points.

Higher-Level Grade	Marks out of 100	Points	Ordinary-Level Grade	Points
H1	90 - 100	100		
H2	80 < 90	88		
H3	70 < 80	77		
H4	60 < 70	66		
H5	50 < 60	56	O1	56
H6	40 < 50	46	O2	46
H7	30 < 40	37	O3	37
H8	0 < 30	0	O4	28
			O5	20
			O6	12
			O7	0
			O8	0

Table 2.2 – Revised CAO points scoring system, effective from August 2017 (CAO, 2016)

It can be argued that the CAO as a company controlled by the HEIs should be undertaking more reforms in terms of the entry mechanism to HE to alleviate the stress and difficulties currently encountered by Leaving Certificate students in the transfer from second to third-level education. One option in terms of reducing the ‘hype’ around Higher Education selection would be to revert to the situation which existed in the past whereby first year would be a generic study period, and specialised or denominated courses would be postponed until second or subsequent years. This could reduce the supply-demand ratio for many courses, thereby lowering the cut-off points. Such a proposal has been discussed but there is little appetite among the HEIs for this type of reform.

2.6 Irish Governmental Policy

In January 2011, the then Minister for Education and Science, Ms Mary Coughlan, TD launched a new National Strategy for Higher Education in Ireland. The strategy development process had commenced in February 2009 under the then Minister, Mr Batt O’Keefe TD, who appointed a strategic review group chaired by Dr Colin Hunt. This committee included representatives from all the stakeholders. The ‘National Strategy for Higher Education to

2030', commonly referred to as the 'Hunt Report', makes two recommendations under the theme of learning and teaching which are relevant to the current research project. These are:

Recommendation number 5 "higher education institutions should prepare first-year students better for their learning experience, so they can engage with it more successfully" and number 6 that "both undergraduate and taught postgraduate programmes should develop the generic skills needed for effective engagement in society and in the workplace" (p.18).

These recommendations, are partly, at least, being adopted following representations from the employer bodies such as the Irish Business & Employers Confederation (IBEC) which wants graduates of Higher Education to have skills and competencies linked to the workplace and employment. The recommendations are broadly in line with similar government policy in the UK and other countries. The UK equivalent entitled 'Higher Education in the Learning Society' commonly known as 'The Dearing Report' made a similar recommendation. Number 21 "We recommend that institutions of higher education begin immediately to develop.....and give intended outcomes of the programme in terms of:.....key skills: communication, numeracy, the use of information technology and learning how to learn; cognitive skills, such as an understanding of methodologies or ability in critical analysis..." Dearing (1997 p.74). These recommendations, again, are also directly linked to representations made by employers.

One point to consider is the fourteen-year gap between the publication of the respective Hunt and Dearing reports. Why the gap? The other question to consider is why did HEIs require government policy initiatives to start adopting transition-related modules, given that there is ample international research to suggest that such innovations benefit learners?

These factors are expanded upon in section 3.5 of the National Strategy - Transition into Higher Education and Access...

Many people believe that second level education does not prepare students adequately for the challenges of higher education. Students entering higher education often lack the critical thinking, problem-solving and independent learning required for successful engagement with higher education" (p. 55).

In section 3.7, under the heading "*learning outcomes – the inclusion of generic skills...*"

Various surveys, nationally and internationally, show that students, academics and employers believe that higher education has an important role to play in preparing students for the workplace and for their role as citizens, and that undergraduate education should explicitly

address the generic skills required for effective engagement in society and the workplace (p. 56-57).

The Irish strategy is following the lead provided by other governments around the world which have responded to this perceived 'generic skills gap' through a range of policy initiatives (Leckey and McGuigan 1997, p.316; Drummond et al. 1998, p.19).

2.7 Transition to Higher Education

The first-year student experience is multifaceted and multidimensional in that it covers a broad range of areas including, but not limited to, programme choice, induction, academic staff, student engagement, pastoral care, access to support services, library, tutors and friendships developed. There is extensive research related to this field. 'The first-year experience: a review of literature for the Higher Education Academy in the UK' by Harvey et al. 2006 cited 750 publications which were reviewed for the report (p.7). They summarised the literature into four recurrent themes:

- 1) Performance and retention, including predicting success, assessing performance and withdrawal and retention;
- 2) Factors impacting on performance and persistence, including institutional, personal and external factors;
- 3) Support for the first-year, including induction, adjustment and skill support;
- 4) Learning and teaching, including new techniques for first-year groups and first-year learning behaviour.

Other authors mention the first-year student experience as providing a critical insight into the wider issues of student engagement, development and retention (Kantanis 2000, p. 101; McInnes, James, and Hartley 2000, p. 24). Entering university is a time of great stress for students, including those who are successful (Greenbank 2007, p. 92; Wintre and Yaffe 2000, p. 10). Some view it as a challenge, others are overwhelmed by the change and do not cope well. Large numbers of students (e.g. up to 40% at some institutions) do not complete the respective study programmes, often due to the difference between the expectations of university life and the actual experience (Gerdes and Mallinckrodt 1994, p.282; Rickinson and Rutherford 1995, p.161; Wintre and Yaffe 2000, p.10). As students transition from the support frameworks of second level schools, they commonly find it difficult to manage the level of autonomy and flexibility, which comes as part of the Higher Education environment. Wintre and Yaffe (2000, p.10) suggest that the reality of the experience at University is harsher and

more stressful than most students expect. The University environment, in particular, the difference between it and school, is the main challenge. New found independence also plays a part, with loneliness, homesickness and difficulties keeping up with academic work being major factors (Rice 1992, p.205; Wintre and Yaffe 2000, p.11).

Perhaps not surprisingly, the first year has been identified as the period in which the greatest amount of academic failure and attrition from study occurs (Hillman 2005, p.10; McInnes, James, and Hartley 2000, p.24). In the view of some researchers (e.g. Tinto 1988, p.89) completion of the first year is 'more than half the battle' in progression to degree completion. The processes by which young people identify with, and become members of, a study community have been likened to those by which individuals progress from youth to full adult status in traditional societies (Hillman 2005, p.10). These processes involve separation, transition and, finally, incorporation into a new group (Hillman 2005, p.11). It is during these first two stages –separation and transition – that the first-year tertiary level student may be at greatest risk of failure (Tinto 1988, p.91). Overall, the literature highlights the need for effective facilitation and support from HEIs to assist first-year student transition.

2.7.1 Support for the Transition to Higher Education

As mentioned earlier, many first-year students struggle in adjusting to Higher Education and the move to self-directed and independent learning. This review does not propose to explore the multi-dimensional aspects of transition. It will concentrate on the approach taken to provide academic supports as a core part of the changeover. The driver of this approach has in the majority of cases been government policy to provide students with key skills both from a learning and future employment perspective. This has led to the adoption of key skills or transition-related modules. Much of the literature on this area is summarised by Badcock et al. (2010) who state that:

For more than 20 years, there has been increasing responsibility placed upon the Higher Education sector to produce versatile and adaptable graduates able to meet the changing demands of the work environment. Among the more widely cited generic skills and graduate attributes are critical thinking, problem-solving, interpersonal skills, a capacity for logical and independent thought, communication and information technology skills, intellectual curiosity and rigor, creativity, ethical awareness and practice, integrity and tolerance (p.441).

A substantive part of the literature that covers many of these areas is based on the experience in Australian, US and UK Higher Education. Despite the evident value of the capacity to

transfer skills across domains and adapt to new situations, generic skills and their acquisition raise a complex set of factors. Firstly, there is the matter of definition. The term 'generic skills' is used in various ways and has numerous synonyms (Clanchy and Ballard 1995, p. 155). In some cases, distinct levels of these skills are identified, and there are widespread differences between employers, academics and government bodies in terms of how they are defined and the manner in which the significance of particular skills is interpreted (Bennett et al. 1999, p.13).

Secondly, the separability of generic and discipline-based skills has been questioned both theoretically and empirically (Barrie et al. 2009, p. 10), and there is no well-developed tradition within HE to attempt independent assessment. Rather, generic skills are typically assumed to develop in conjunction with the enhancement of knowledge and skills within a discipline area (Drummond et al. 1998, p. 20). While assessment tasks might include generic skills among the listed objectives and explicit criteria, levels of attainment of particular generic skills are rarely reported separately from discipline content knowledge. Kemp & Seagraves (1995, p.316) state that:

research in cognitive development and related cognitive skills (analysis, synthesis, critical thinking, problem-solving) suggests that these are discipline related...We live in contexts, we learn in contexts, we work in contexts and no two contexts are exactly the same. Our ability to contextualise skills is as important as the skills themselves.

Thirdly, there are challenges with the teaching of generic skills within University curricula. It is important to acknowledge that Universities recognise the value of generic skills and the role of tertiary education in their development (Barrie, 2004, p.262). Many University teachers consider some of the skills labelled 'generic'—such as writing skills and critical thinking—to be central to learning in their disciplines. The challenge remains, however, in balancing the teaching of discipline-specific knowledge and skills with the development of more transferable skills, and integrating both within University curricula (Barrie et al. 2009, p.11).

The delivery models employed for these supports are either embedded or 'bolt-on' modules. A common approach to providing learning support is by means of extracurricular 'study skills' courses, often offered in dedicated learning support centres (Gamache 2002, p.277; Haggis & Pouget 2002, p.324). This approach is referred to as 'bolt-on' (Bennett et al. 2000, p.24), as opposed to the 'built-in' or embedded approach, where learning is developed through subject

teaching. The bolt-on approach has severe limitations, mainly because it separates study skills from the process and content of learning. Such provision has its origins in the previous highly selective system within which students were expected to enter University equipped with adequate skills to study effectively. The lack of 'study skills' was regarded as the problem of a few 'at-risk' students, and, in what Cottrell (2001 p.46) calls the 'remedial approach', these students were sent outside of the department for help.

Hattie et al. (1996) in their meta-analysis of this area reviewed 51 studies of attempts to improve student learning by the introduction of initiatives outside of the normal teaching context, generally called 'study skills interventions'.

These interventions have aimed at enhancing motivation, mnemonic skills, self-regulation, study-related skills such as time management, and even general ability itself; creating positive attitudes toward both content and context; and minimizing learning pathologies.... A general explanation for these programs is that they are interventions for enhancing learning (p. 9).

Their results support the notion of situated cognition, whereby it is recommended that training other than for simple mnemonic performance should be in context, use tasks within the same domain as the target content, and promote a high degree of learner activity and metacognitive awareness. Module designers within HEIs with or considering such modules should bear in mind this literature in particular that of Kemp and Seagraves and Hattie et al. when designing or modifying their module content and approach to teaching.

2.7.2 Criticism of Study Skills

There is intense criticism of study skills, most of which focus on the structure or approach taken by HEIs. There are many topics that can potentially be included and much of the unease tends to concentrate on the content of the module. For example, the syllabus may include basic skills such as literacy and numeracy, key skills generic to the programme or HEI, and study techniques such as the academic skills required in HE. There can be significant overlap between these elements. Then there is the delivery structure, is it a bolt-on module or embedded within all modules. Wingate in one of the most cited papers in this field, titled 'Doing away with study skills', argues that

the widespread approach to enhancing student learning through separate study skills courses is ineffective, and that the term 'study skills' itself has misleading implications, which are

counterproductive to learning. The main argument is that learning how to study effectively at university cannot be separated from subject content and the process of learning (2006 p.457).

This view is supported by Durkin & Main (2002, p.24) who found that “extra-curricular skills courses are often not attended by the students who need them most, but by higher achieving students who want to enhance their performance” and by Drummond et al. (1998, p.20) who discovered that “students do not recognise generic course as relevant to their subjects”. Nisbet and Shucksmith (1986, p.101) point out that some skills courses “degenerate into techniques for passing examinations and for coping with the system rather than developing the skills of learning”. Gamache (2002, p.277) highlights that “teaching study skills without linking them to subject content inevitably encourages the undesirable epistemological belief that knowledge is an ‘external, objective body of facts’ which can be acquired with certain tricks and techniques”. Furthermore, Knight and Yorke (2002) suggest that the Dearing Report had a fairly wide view of employability, yet chose to focus attention on its recommendations on the key skills of communication, numeracy, the use of information technology and learning how to learn.

Many institutions have packaged up key skills (not necessarily those identified by Dearing) into separate modules, sometimes trivialising them and dis-integrating them from the curriculum. Put colourfully, in such circumstances key skills – and, by extension, employability – are being ghettoised (p.263)

An obvious question is why would HEIs take the stand-alone module approach? Pragmatism, and practicality issues associated with implementing the embedded approach are significant factors in any attempt to answer this question. There are organisational and managerial problems associated with coordinating progressive skills development throughout all the years of an academic programme and linked to having academic staff concern themselves with student learning when they are more focused on their specific disciplines than on skills development. At an organisational level, ensuring that an embedded approach is being implemented on the ground is a significant task to evaluate; hence the standalone approach tends to dominate.

2.7.3 Transition within an Irish Context

Within a specific Irish context there are two main research publications in this area, as referenced above; the first by the ESRI and the second by the National Forum for the Enhancement of Teaching and Learning in Higher Education (NFETL) which explored students' experiences on transition to HE. The ERSI study identified a significant difference between the teaching and learning in post primary and in HE. In particular, specific aspects such as engaging with self-directed learning and managing deadlines were highlighted. Two interesting findings were that students within the IoT sector reported having more difficulties and indicated that the support within the HEI played a key role in reducing such problems.

A large majority of leavers reported significant differences in teaching and learning between their second-level education and their post-school course. They indicated particular difficulties in relation to the standard expected of them, the difficulty of the course and managing their workload. A key factor emerging from the in-depth interviews was the need to engage in self-directed learning in further/higher education, especially the challenges in managing deadlines, which was contrasted with the more directive approach adopted in school. The nature of the current course also made a difference, with greater difficulties reported among those on science/engineering courses and attending an Institute of Technology than among other students. Social difficulties over the transition, in terms of making new friends, were greater among those who had felt more isolated in sixth year Support within the further/higher education institution played a key role in reducing the prevalence of both academic and social difficulties (McCoy et al. 2014, p.15)

The NFETL research examined the extent to which early stage HE students have been equipped with the skills, competencies and orientations required to succeed in HE. The main finding of the research was that:

Time management was identified by the students as the most significant element of the transition from second level to higher education. This was followed by a change in the requirements for written assessments, critical thinking and conducting independent research. Other areas identified as challenging included increased personal responsibility, financial and social challenges (Denny 2015, p.5).

Other findings from this research were that students suggested “more introductory classes on the academic skills required for higher education such as referencing, essay writing, note-taking etc. In particular, many students indicated that introductory courses should be more course specific” (Denny 2015, p. 6). Within her research students, were asked to identify the skills and competencies needed to succeed in Higher Education. Table 2.3 below outlines the findings in response to this question - with time management being the highest ranked.

Nodes	# Refs	Nodes	# Refs
Time Management	22	Responsible	5
Organisation Skills	20	Orientation Skills	5
Self-Discipline	16	Social Skills	5
Confidence	13	Ambitious	5
Motivation	13	Work Ethic	4
Note Taking	9	Determined	4
Communication	9	Study Skills	4
Hardworking	8	Enthusiasm	3
IT Skills	7	Group Work	2
Research Skills	6	Critical Thinking	1
Adaptability	6		

Table 2.3 – Suggested skills required to succeed in Higher Education (Denny 2015, p.35)

The research also asked students what was or would be helpful in assisting with the transition.

The findings under the theme of Higher Education supports are outlined in Table 2.4 below

Higher Education Supports	# Refs
Intro to Note Taking, Time Management, Study skills, Essays, Grading etc	137
More use of higher education study mentors	42
More/better Course specific information	40
Course orientation by existing students	12
More general orientation (e.g. campus tour, life at college)	27
Social Interaction with Future Class	21
Higher education Staff Mentor	11
Better accommodation support for 1 st years	9
Social Support for Mature students	5

Table 2.4 – Supports to assist with Transition (Denny 2015, p.37)

The research findings are interesting and welcome within an Irish context and are in line with the literature related to the transition process. The feedback in relation to HE supports confirms the view that students have a strong impression that an introduction to academic activities such as note taking, time management and study skills is helpful with the transition. This is very pertinent to the theme of the current research project. The importance of managing deadlines/time management was highlighted in both studies mentioned above.

The singular criticism of the NFETL research is that while it was conducted in four academic institutions only one was an Institute of Technology and none of the four participating HEIs had a specific module to support students with the transition to HE. The research might have provided some alternative findings had it included a HEI with a dedicated transition-related module.

2.7.4 Current Landscape of Transition-Related Modules in Irish HEIs

A review of the websites and online prospectuses of all fourteen Institutes of Technology and seven Universities provides an interesting picture on the adoption of transition-related modules within Business Schools in Irish Higher Education. Table 2.5 below shows that 10 of the 14 (71%) Business Schools in the IoT sector have such a module and 7 (50%) have it as a mandatory component in the first semester of year one. Only one University offers this element, which is presented as a mandatory module on a range of study programmes. Why are the majority of the Institutes of Technology (IoTs) adopting this approach, and yet there is such a module in only one University? This is among the questions that the current research thesis aims to explore. Perhaps the driving force for adoption in the IoTs is the National Higher Education Policy in terms of the implementing the recommendation of the National Strategy for Higher Education to 2020, which have been outlined in Section 2.6 above. An alternative reason could be the existence of an embedded rather an explicit approach or the placing of a lesser emphasis on compliance with government policy within the University sector.

HEIs		Transition Module Adopted			%
IoTs (14 in Total)		10/14 , all courses 7/14			71%, 50%
Universities (7 in Total)		1/7, all courses 0/7			14%
HEI		Specific Transition Module	Mandatory or Elective	Module Title	Location
Athlone IT (AIT)	1	Yes	M, all courses	Learning and Development for Higher Education (formerly Learning to Learn)	Y1, S1
Blanchardstown IT (ITB)	2	Yes	M, all courses	Skills for Success in Higher Education	Y1, S1
Carlow IT (ITC)	3	Yes	E, limited courses	Writing, Presentation & Research Skills	Y1, S1
Cork IT (CIT)	4	Yes	M, all courses	Creativity, Innovation & Teamwork	Y1, S1
Dublin IT (DIT)	5	No			
Dundalk IT (DKIT)	6	Yes	M, limited courses	Research and Communication Skills	Y1, S1
Dun Laoghaire IT (IADT)	7	No			
Galway Mayo IT (GMIT)	8	Yes	M, all courses	Learning and Innovation Skills (formerly Learning to Learn)	Y1, S1
Limerick IT (LIT)	9	No			
Letterkenny IT (LYIT)	10	Yes	M, all courses	Learning and Communication Skills	Y1, S1
Sligo IT (ITS)	11	Yes	M, limited courses	Personal Learning & Development	Y1, S1
Tallaght (ITT Dublin)	12	Yes	M, all courses	Learning to Learn at Third Level	Y1, S1
Tralee IT (IT Tralee)	13	Yes	M, all courses	Learning at Third Level	Y1, S1
Waterford IT (WIT)	14	No			
University College Dublin (UCD)	1	Yes, Business School	M, limited courses	Effective Learning and Development	Y1, S1
University College Cork (UCC)	2	No			
NUI, Galway	3	No			
NUI, Maynooth	4	No			
University of Limerick (UL)	5	No			
Trinity College Dublin (TCD)	6	No			
Dublin City University (DCU)	7	No			

Table 2.5 – Listing of the Business Schools in the Institutes of Technology and Universities and the existence (or otherwise) of specific transition-related modules.

As Table 2.5 illustrates, Irish HEIs adopt different approaches, with ten Institutes of Technology and one University Business Schools having implemented a transition-related module (seven having it as a mandatory component). A moot point worthy of discussion, and often not given the consideration it deserves, is the module title. None of the modules has the same name, although many have the word 'Learning' in the title and 'Learning to Learn' is or was part of the title in three HEIs. Two institutions in recent years have changed the name. The original 'Learning to Learn' title stemmed from the implementation of the National Framework of Qualifications in 2005 which established the National Awards Standards across eight categories with 'Learning to Learn' being one of these (Anon. 2005, p.5). Many HEIs simply took this award standard and applied it to the relevant modules. This was the case in the HEI where the author is employed and the rationale for the change of name from 'Learning to Learn' to 'Learning and Development for Higher Education' arose from feedback supplied by students who felt that the original title could be perceived as patronising and that it was turning some students away from engaging.

The focus for any HEI considering the options available to provide future graduates with the knowledge, skills and attributes that would enable them to successfully complete their studies and be applicable onwards in the workplace needs to be defined clearly. Towards this end, when designing a programme, one of the many challenges is which option to select in order to provide the most meaningful support for the proposed skills development. Based on the literature, the following are the main factors to consider.

- Whether to seek to develop these generic skills as part of a standalone introductory module or embed them within all modules of each study programme; or a combination of both approaches?
- Should a standalone module be introduced, how, if at all, will the module be integrated with the remainder of the curriculum?
- Which development/academic skills do you include in the module (the above literature highlights many different areas) and is it possible to include all of these?
- Are the developmental transitional modules confined to year one or should such activities be included in all years of a programme of study?

- Are the developmental/academic activities transferable across disciplines i.e. should you teach the same content to Business, Humanities, Science and Engineering students?
- What is the most appropriate assessment strategy for deployment in relation to these modules?

By offering students an introductory module that covers a range of developmental activities, a foundation is being provided that will assist them with the transition from post primary to HE and prepare them for the onward route to lifelong learning.

2.7.5 The approach in one Irish HEI

The approach adopted by the particular HEI in which the author is employed was to introduce a discipline-specific module that would incorporate many of the generic features which are deemed to be essential skills that are outlined in the literature under the title 'Learning to Learn'. The AIT Business School module was influenced by the National Council for Curriculum and Assessment (NCCA) 'key skills framework' as outlined in Figure 2.1 below and sought to integrate and enhance the aims of the framework by bringing elements of the Senior Cycle at post-primary level to the field of Higher Education. The NCCA adopted the 'key skills framework' in line with international trends and the development was informed by the OECD 'Defining and Selecting Key Competencies' initiative, the framework forms part of the curriculum and teaching and learning at Senior Cycle. Following consultation, engagement with schools, and research, five key skills were identified as central to teaching and learning across the Senior Cycle curriculum. These are information processing; being personally effective; communicating; critical and creative thinking; and working with others. The NCCA regard key skills as playing an important part in all learners achieving their potential, both during their time in school and in the future. The author is aware that the key skills framework has subsequently been updated as part of the revised junior certificate programme called 'key skills of the junior certificate' and includes broader constructs such as 'staying well' which is to welcomed. The key skills are included in the literature from a point in time perspective and to demonstrate the influence they had on the design of one version of the module being used in Irish HE.

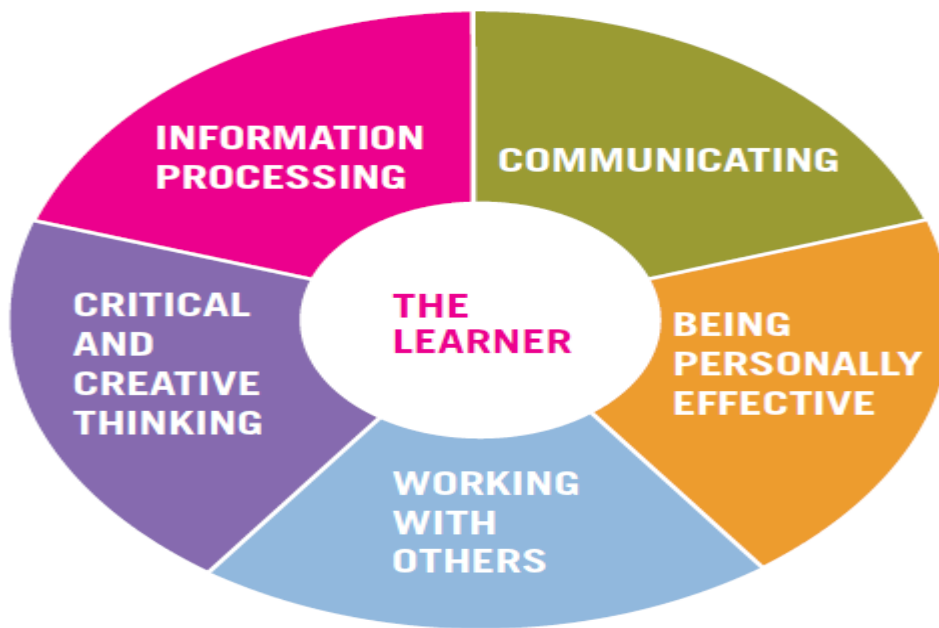


Figure 2.1 – NCCA Key Skills Framework (NCCA, 2009)

The NCCA key skills framework document sets out a

Vision of learners, completing Senior Cycle is that they would pursue excellence in learning and develop a love of learning. They will engage with the knowledge, skills, attitudes and values that will enable them to learn how to learn. Learning to learn requires the development of positive beliefs about learning and a willingness to engage with new learning situations. It helps learners to take more responsibility for their own learning as they proceed to senior cycle education, gradually decreasing their levels of dependency and teacher direction. As learners engage with each of the key skills they grow in the knowledge about learning and skills of learning, both in general terms and the particular context for their own learning. In this way each of the five skills contributes to learning to learn (NCCA 2009, p.2)

The reality is that students and teachers are very much focused on the terminal Leaving Certificate examination and the above vision is neglected in the race to ensure students achieve the maximum points possible. Were the wider horizon to be achieved, then the argument for transition-related modules would be redundant. In fact, the author would contend that if students were to achieve the reality inherent in the above vision on completion of their Higher Education significant progress would have been achieved. Thus, it is his firm belief that students need support in the transition to HE and that in order to ensure that they are prepared to consider alternative perspectives and develop an understanding of such a different learning environment. The AIT Business School view is that the module should not be seen in isolation but that the skills, knowledge and competencies developed in this

module should be enhanced, integrated and reinforced across all other modules throughout the HE journey. The author does not propose that the module content should be prescribed, but rather that each HEI might develop its own discipline-specific competencies as part of the education continuum from post-primary level. The key goal of any such process is to assist students with transition and impact their transformation into independent learners and higher-order thinkers, as required for success in Higher Education.

2.8 Performance-based Funding

As highlighted above, government strategy towards Higher Education is among the key drivers of the emphasis placed on the transition from second-level schooling in Ireland. In addition, there have been recent moves towards a performance-based model for HE. The priorities in the National Strategy for Higher Education will become the basis for possible metrics associated with performance-based funding, among them transition statistics such as the level of progression from year one to year two. The Higher Education Authority (HEA) has implemented a performance-based funding model within Irish higher education in line with the recommendations of the National Strategy for Higher Education. The model is very much aligned with international practice whereby government funding for Higher Education is linked to performance targets and key performance indicators (KPIs). In fact, it could be argued that the Irish government simply adopted the Australian performance funding model, with little modification for the Irish context. The Department of Education and Skills outlined the plan for the introduction of performance-related funding in September 2013 in a report titled 'Higher Education System Performance Framework'. The report proposes a framework and:

sets out the areas of responsibility for setting national priorities of Government and related short to medium term objectives for the higher education system. The HEA will use this framework as the context for conducting a process of strategic dialogue with individual institutions where institutions will agree performance compacts with the HEA with institutional KPIs reflecting their contribution to overall system objectives (HEA 2013, p.2).

In terms of the relevance of performance-based funding to this current research project, the HEA in its strategic dialogue process is placing a strong emphasis on KPIs in areas such as the level of student non-progression from year 1 to 2 within Higher Education. The strategic dialogue process commenced in September 2013, with each HEI in Ireland being required to

produce and submit to the HEA a mission-based performance compact for the period 2014 to 2016. This was followed up by meetings with each HEI that subjected each compact to evaluation by an international review panel. The output of these meetings was a finalised performance compact that set out KPIs in areas such as participation, equality of access, lifelong learning, teaching and learning, and the quality of the student experience.

A key component of the assessment of institutional performance will be an annual self-evaluation of overall performance and progress against agreed objectives, as set out in the specific institutional compact. This evaluation will take the form of an annual performance report to the HEA. The amount of funding that was performance linked in 2014 is relatively small (at 5% of individual HEI budgets) with the bulk of the 5% being awarded on the basis of compliance and engagement with the systems performance framework approach. Based on the operation of similar performance-based models in other countries, it can be assumed that the amount of an individual HEI's budget that is linked to performance will increase gradually over the coming years. Commentators such as Zajda (2014) view such an approach as being part of a neo-liberal educational policy designed to effect accountability, choice and quality. The current research study does not propose to debate the merits or otherwise of performance-based funding, a subject deemed to be worthy of distinct research at doctoral level. The inclusion of references to performance-based funding is provided by way of context, as non-completion rates from year 1 to year 2 will probably be one of the key KPIs measured on an annual basis.

The author contends that the implementation of the above approach represents an attempt by the Department of Education and Skills and the HEA to force individual HEIs to align with national policies across a range of areas. Attempts to diverge are likely to result in reduced funding allocations. Whether they will achieve such an aim is a matter for debate. Less compliance is likely to be evident within the Universities as compared to the Institutes of Technologies. A possible explanation for this is that the University sector has enjoyed significant autonomy from government as compared to the IoT sector. The one area which will probably be enhanced as a result of this process is evaluation. At present, many HEIs undertake initiatives but do not fully evaluate their impact. In future years, evaluation of

initiatives will be required for incorporation into the planning stage and, in the opinion of the author, this is a positive development.

2.9 Evaluation

Evaluation is defined as ‘the making of a judgement about the amount, number, or value of something’ (Oxford Dictionaries Online 2014). In the context of Irish Higher Education, evaluation is often associated with programmes of study. It implies a systematic examination of each aspect of the study programme i.e. its precepts, prerequisites, place in the total curriculum, the selection and ordering of content, the choice of teaching and assessment methods, and the destination of graduates. All of this effort is undertaken with the view to improving the programme for future generations of students. Evaluation should be distinguished from assessment, which is a measure of students’ progress and accountability, as it represents a public manifestation of the inherent value and effectiveness of a study programme or, more usually, an entire curriculum. Evaluations are usually undertaken for a number of reasons such as, to investigate a known problem, identify potential improvements, programme revalidation, reorganisation of material, endorse the current offering or appraise the impact of innovation. In the context of evaluation in Higher Education, the work of Quinn Patton (1982), Kirkpartick (1994) and Guba & Lincoln (1985) is among the most often cited.

In an Irish context, the objectives of the Bologna Process and the implementation of the National Framework of Qualifications (NFQ) was, in part, to facilitate the evaluative process. In the author’s experience, evaluation post the implementation of the NFQ has resulted in an increased focus on quality. Whether Irish Higher Education is adopting good practice in terms of evaluation is open to debate. The OCED review of quality teaching in Higher Education found that the vast majority of initiatives supporting teaching quality are empirical and address institutional needs at a given point in time. Initiatives inspired by academic literature are rare (Hénard, 2010, p. 5). The author agrees with this assessment, as many evaluations appear to be lacking the rigour required to withstand critical appraisal. The development of the Irish Survey of Student Engagement (ISSE) is one initiative to address some of the deficits in the current system of evaluation; a major weakness being the lack of feedback on academic staff performance in the classroom (in particular within the IoT sector in Ireland as a result of strong trade union resistance).

Research undertaken by the Carrick Institute for Learning and Teaching in Higher Education in Australia examined the quality process and trends in teaching and learning in Australia and several OECD countries, and indicators of teaching and learning performance at national and University level. The report titled 'A review of Australian and international quality systems and indicators of learning and teaching' discovered that "a pervasive trend across all the countries reviewed is the establishment of national systems of accreditation, quality processes and audit and requirements to provide information on performance indicators" (Chalmers 2007, p.68)

Among the global trends evident in Higher Education cited in the report is the fact that HE is now more than ever seen as an economic commodity, with increased interest in linking employment outcomes to HE (employment and graduate destinations). This, in turn, has led to interest from governments and funding agencies in measuring the employability of students through reviews of learning and employment outcomes. There is an increasing interest in performance-funding based on measures and indicators.

Many questionnaires and other instruments used to assess outcomes in HE have been criticised primarily for their emphasis on the delivery of teaching rather than the issue of student learning. Saroyan and Amundsen (2001, p.342) maintain that many course evaluations concentrate on a very limited aspect of teaching, i.e. that of delivery of instruction and, to some extent, the planning which proceeds it and the evaluation of learning which follows it. They highlight a problem in that there exists a whole range of underlying processes of teaching that are not observable and which remain unexplored, i.e. to what extent are students understanding and engaging with the information presented.

The Course Experience Questionnaire (CEQ) (Ramsden 1991, p.130) is the most commonly used standardised questionnaire in the context of the current discussion. It is in widespread use in Australia and the UK. The purpose is to measure graduate students' views on the entire study programme using scales related to the areas of good teaching, clear goals and standards, generic skills, appropriate assessment and realistic workload. There are many critics of the CEQ. Some argue that the focus of the CEQ is too narrow as a measure of the entirety of the student experience. Niland contends that:

the theoretical construction and the practical application of the CEQ is open to criticism. Since its original development as a proxy measure of quality of student learning, the CEQ has been used for a range of purposes, some very different than for what it was intended, i.e. for determining institutional funding and use by third parties to construct league tables.. Nevertheless, the CEQ remains a widely used measure of student quality of learning (Niland 1999, p.6).

The National Student Survey (NSS) in the UK is targeted mostly at final-year undergraduates in England, Wales, Northern Ireland and participating Higher Education Institutions (HEIs) in Scotland. The survey provides students with an opportunity to express opinions on their HE educational experience. The results are analysed and used to compile a year-on-year comparison of data which helps prospective students make informed choices regarding which programme to study. It also enables the participating institutions to identify areas for improvement and enhancement. The current research project proposes to use a questionnaire that is linked to the Irish Survey of Student Engagement (ISSE) (which is closely linked to the NSS) and elements of the CEQ, thereby avoiding any possible industrial relations issues.

2.10 Conceptual Framework Self-theories

In Irish Higher Education as already emphasised, the discussions, debates, narratives and conversations with regard to student performance are dominated by the topic of CAO entry points. Many study programmes have minimum entry grades in terms of specific subjects such as Mathematics (as mentioned earlier, research undertaken by the ESRI shows that performance in certain Leaving Certificate subjects such as English and Mathematics tends to be a valid predictor of performance in subsequent attainment in HE). These discussions can be very much focused on already formed perceptions of students, based on their performance in the Leaving Certificate examinations, in particular, performance in Mathematics. It does not take due account of the range of factors that could have led to student underperformance in the Leaving Certificate examination. Students' self-perception and previous educational experiences are significant factors often overlooked in this debate. Research asserts that an individual's beliefs, mindset, self-perception, work ethic and resilience are greater determinants in influencing student performance in HE. Many students entering the third-level sector (in particular those attending Institutes of Technology) come from the lower socio-economic classifications, with some being the first family member in a

generation to attend HE. These students often have negative perceptions of their own academic abilities.

Based on the author's employment as a senior manager within Irish Higher Education for the past 13 years, it is his belief that the narrative with regard to student performance, retention and progression requires a change in focus. The debate should not just be confined to CAO points and the grades received by students in certain subjects. The emphasis should be framed in terms of how to develop students' perceptions of themselves and designed to instil in them the belief, confidence, good habits, resilience and skills required to be successful in Higher Education. Many students attending Institutes of Technology would have lower self-perceptions than those in the University sector, a factor stemming from previous performance in the Leaving Certificate and other examinations, as well as incorporating influencers such as primary and second-level teachers.

This epistemological outlook stems from the work of cognitive and social psychologists such as Carol Dweck. The theory is not a new one Alfred Binet (who developed the IQ test) in 1909 stated "what students should learn first is not the subjects ordinarily taught, however important they may be; they should be given lessons of will, of attention, of discipline; before exercises in grammar, they need to be exercised in mental orthopaedics; in a word, they must learn how to learn" (p.10). Furthermore, Alfred Whitehead, philosopher and Harvard Professor, stated in 1938 that "The belief in fixed versus malleable human attributes can be seen as a core assumption in an individual's world view" (p.6).

Dweck and her colleagues, in work that spanned a couple of decades, has sought to identify key implicit beliefs and to establish their relevance for the processing of social information. Their research initially identified implicit theories which established a framework for analysing and interpreting human actions and has evolved to demonstrate the power of self-theories to influence the manner in which students tackle tasks. These implicit theories refer to the two different assumptions people may make about the malleability of personal attributes; they may believe that a highly valued personal attribute, such as intelligence, is a fixed, non-malleable trait (entity theory), or they may believe that the attribute is a malleable quality that can be changed and developed (incremental theory). Entity theory is thus based

on the belief that intelligence is a fixed trait; we have a certain amount of intelligence and that's that. The term 'entity theory' is used because intelligence is portrayed as an entity that dwells within us and which we cannot change. Incremental theory on the other hand, is based on the belief that intelligence is not a fixed trait that we simply possess, but something which can be cultivated through learning. The term 'incremental theory' is used because intelligence is portrayed as a factor that can be increased through individual effort.

These views have many repercussions for students. For those with an entity view, it can cause them worry about how much of this fixed intelligence they have. It can make them interested first and foremost in looking and feeling as though they have enough. They must look smart at all cost and not appear dumb. For those with an incremental view, it can lead them to want to learn. After all, if your intelligence can be increased, why not do so? Why waste time worrying about looking smart or dull, when you could become smarter? And, in fact, students with this attitude will readily sacrifice the desire to look smart in favour of opportunities to learn something new (Dweck & Leggett 1998, p.261). Grant and Dweck (2003, p.905) tracked college students during an introductory Chemistry course which represented the entry stage for a pre-medicine curriculum. Thus, it was an important opportunity for most students, as well as a challenging one with the average exam grade equalling a C+. Grant and Dweck found that the more the students held learning goals, the more they reported as engaging in deep processing of course material e.g., outlining the material, relating different concepts to each other, attempting to integrate the material across units. The tendency to engage in deep processing was predictive of higher course grades, and this tendency mediated the positive relation between learning goals and course results. Students with entity beliefs tend to adopt performance goals, that is, they seek to demonstrate and confirm their (believed fixed) level of ability and to avoid outcomes that would undermine same. Incremental self-theorists, on the other hand, are inclined to adopt learning goals, seeing the challenges they face as opportunities for learning. For them, lack of success tends to be a stimulus for learning (requiring more or better-focused effort) and less of a challenge to their believed ability level.

The terms 'entity' and 'incremental' used by Dweck have evolved, as her theory has, to more informative adjectives such as 'fixed' and 'growth'. Her book 'Mindset: How You Can Fulfil Your Potential' is now in its 10th edition. She states that:

The 'growth' position is that, with effort, one simply can achieve more and, in doing so, ascend a virtuous spiral. People who hold the fixed view can be strikingly successful but, when faced with difficult challenges, they are prone to judge, in advance, whether it is something they can succeed at or not. Those who are used to encountering tasks they suppose to be too hard will tend towards 'learned helplessness'. Those of a 'fixed' disposition who are more used to success are likely to be less persistent than those of a malleable disposition, which is why malleability is preferable—it makes for greater versatility (Dweck 2012, p.5).

Yorke and Knight (2004), based on the work of Dweck, researched academic staff and undergraduates' thinking about self-theories in Higher Education. Some 70 academic staff and 2,269 students in 5 Universities in the North West of England took part in the research that asked both groups for their views, on a 4-point scale of, 'disagree to agree', with the statement that 'an individual can't change their intelligence by much'. The findings suggest that between 25 to 30% of both staff and students tend towards a fixed view of intelligence, and the 70 to 75% towards the malleable interpretation. They contend that self-theories of students are of obvious significance for Higher Education, and education in general. In addition, they conclude that the self-theories of teachers are likely to bear considerably on student attainment. However, the significance of this aspect of self-theorising appears to be largely overlooked. The interplay between the self-theories held by a teacher and the student may be particularly significant. It would seem reasonable to suggest that the diversity in the whole staff and student population as regards to their malleability/fixedness could have substantive implications for teaching and learning in HE. The facilitation of learning should encourage in students something of a 'get up and go' spirit with an openness to risk potential failure. Bearing in mind that one needs to think in terms of academic staff having some effect on groups of students, Yorke and Knight set out three implications of Dweck's work that such staff should be aware of:

- 1) appreciate the significance of self-theories for student learning
- 2) be able to infer whether students are inclined towards fixedness or malleability; and
- 3) possess strategies for encouraging the fixed student to move towards malleability (Yorke & Knight 2004, p.30).

One area that is not covered in this research but is worthy of consideration is the potential impact of a teacher's self-theory and how it's projected on to students.

Students with a fixed belief about their intelligence are likely to be discouraged by a lack of success because failure is construed in terms of inadequate intelligence: they may well duck challenging work after an initial poor result because a further unsatisfactory result could undermine their (vulnerable) view of themselves. Dweck points to a further undesirable feature of fixed beliefs about intelligence. If a task is difficult, those with fixed self-theories are prone to conclude that they are not clever enough to succeed, and so give up. They tend to lack persistence in the face of novel tasks that they find complex and difficult. In this way, even 'clever' people may develop a 'learned helplessness' which can be a corrosive belief that they are not intelligent enough (or personable enough, or skilled enough) to succeed in the relevant context. This can lead them to attempt to protect their self-esteem from damage by not trying (of course, not trying makes failure more likely, but at least the thought that they might have succeeded, which is unlikely if they had made more effort provides a defence for self-esteem). Those with a malleable self-theory are more likely to attribute poor performance to a failure to put in enough and/or the right kind of effort. The lower level performance can be a spur to further learning. These students are more likely than their fixed-oriented counterparts to be focusing on the development of their learning rather than on performing in ways that do not threaten their belief in their ability. The driver for them is learning, not propping up a rickety self-esteem and, although learning can itself be a source of self-esteem, the self-esteem develops consequentially.

In the US, the National Survey of Student Engagement (NSSE) each year affords an opportunity for the inclusion of additional questions on topics that may be of interest to HEIs and researchers. In the 2016 iteration of NSSE, the extra questions related to students' views on mindset. Below is an extract from the 2016 NSSE annual results report:

To explore the relationships between mindset and engagement in effective educational practice, about 11,000 first-year students and seniors from a diverse group of 38 U.S. colleges and universities completed a set of questions appended to NSSE to assess their mindset (items were adapted from Dweck, 1995, 2006). Results indicate that a majority believe intelligence is malleable, suggesting a growth mindset. In fact, depending on the question, well over half to three-quarters agreed or strongly agreed with this basic premise (p. 5)(Figure 4).

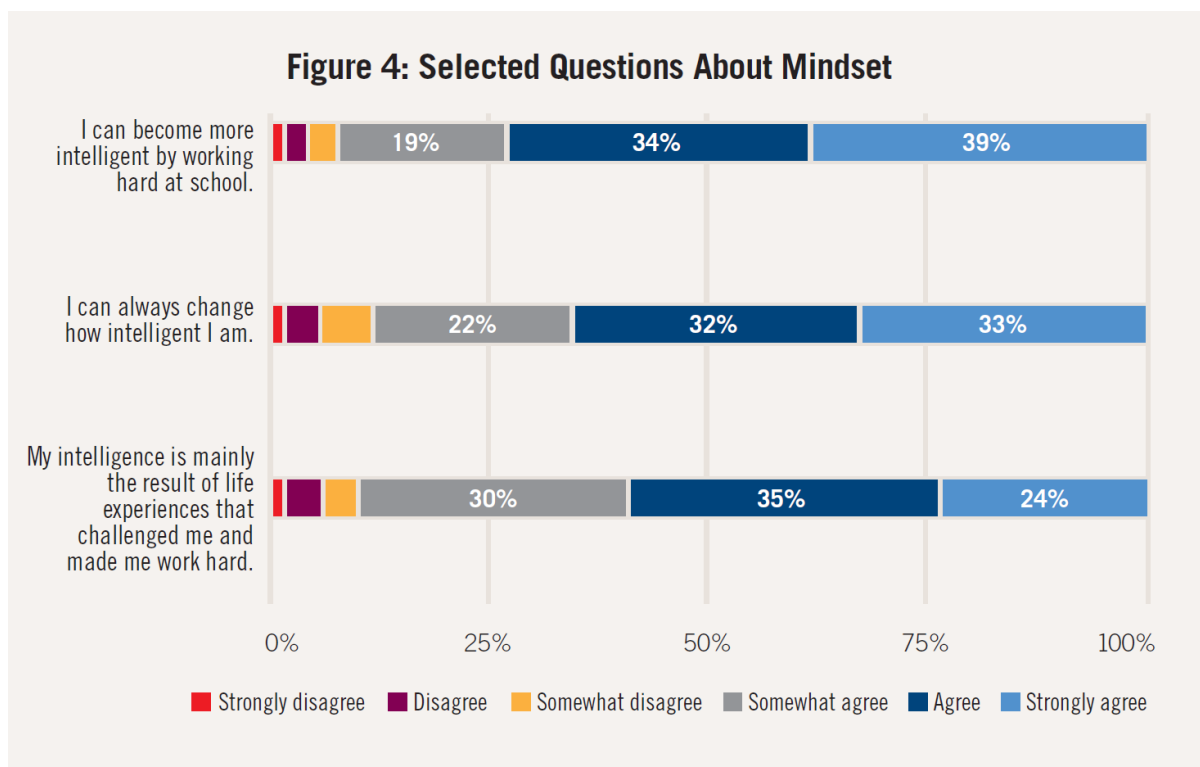


Figure 2.2 – NSSE 2016 results of additional questions on mindset. (Figure 4 in NSSE 2016)

On finding this study, the author hoped that a rich source of data could potentially be available to enable comparisons to his data set. He contacted NSSE (via email) based at Indiana University to determine if it might be possible to access anonymised data. However, the reply from NSSE ruled out such a possibility. The response from the Director of Survey Operations stated that: “Given the recency and experimental nature of these data, they are not available for data sharing. We will continue to analyze the data and attempt to publish based on it, after which point they may become available to others but that may not be for several years”. The email exchange is included in [Appendix D](#). The Irish equivalent survey (ISSE) does not currently afford HEIs the opportunity to include additional questions. The author has lobbied for the inclusion of additional questions and, in coming years, it may be possible to include mindset related questions. Such questions would enable the opportunity to undertake a direct comparison with the US data. While the author was disappointed at being unable to access the US data he was equally encouraged that there is validity in his research as similar mindset questions were included in the NSSE.

2.10.1 Critique of Self-theories

Self-theories are another constituent in an exhaustive list of theories in educational literature that relate to students' success across all levels of education. The degree of exposure to these theories often depends on the ability of the author to promote them through various media. The more in vogue ones are those that can make the leap from education literature into mainstream media. Self-theories is certainly one of those, with Dweck's book being among the best sellers within certain categories on Amazon.com. The theory lacks a multidimensional perspective by focusing particularly on academic intelligence at the expense of practical intelligence. Sternberg and Grigorenko (2000, p.216) draw a distinction between *academic* intelligence (defined in terms of conventional definitions and tests) and *practical* intelligence (defined in terms of the capacity to behave effectively in everyday life). It is worth noting that practical intelligence shows a marked similarity to the construct of 'capability' (Stephenson 1998, p.2). Of particular importance for the educator in Higher Education is the acknowledgement by Sternberg and Grigorenko (p.218) of differences between the temporal *trajectories* of academic and practical intelligence. Although researchers have come up with differing views regarding these trajectories, it seems that whereas academic intelligence tends to decline from young adulthood onwards, practical intelligence may continue to develop throughout the bulk of a person's life. Individuals are generally faced with solving practical problems of various kinds, activities which call for the integration of understanding and skills from different fields of endeavour. Irrespective of the view taken regarding the possibility of developing academic intelligence, the consensus on practical intelligence is that there exists considerable developmental potential. In order to go further with this idea, you need to replace the IQ-based view of intelligence with a construct that is broader. Gardner (1983, p.8) provided a warning that the notion of intelligence should not be treated simplistically i.e. "we use [intelligence] so often that we have come to believe in its existence, as a genuine tangible, measurable entity, rather than as a convenient way of labelling some phenomena that may (but may well not) exist". In rejecting a static and unidimensional concept of intelligence, Gardner put forward the idea that there is a multiplicity of interrelated intelligences. Hedlund and Sternberg (2000, p. 138), amongst others, subsequently raised questions about the extent of the multiplicity that Gardner had posited.

As discussed earlier, the reasons that students fail to achieve their potential in Higher Education are multifaceted, with various psychosocial and/or skills factors influencing their success (Pascarella & Terenzini 1991, p.17; Tinto 1998, p.91). Self-theories lack a multidimensional framework which considers other factors that influence student outcomes. Robbins et al. (2004) undertook a series of studies which sought to meta-analytically examine the validities of various psychosocial and study skills constructs in predicting two important college success criteria: academic performance (i.e. college grade point average [GPA]) and persistence (i.e. college retention). On the basis of 109 studies, the authors identified and studied the following nine broad constructs derived from educational persistence and motivational models of college success: achievement motivation; academic goals; institutional commitment; perceived social support; social involvement; academic self-efficacy; general self-concept; academic-related skills; and contextual influences. After controlling for the effects of traditional predictors (i.e. high school GPA, ACT and SAT assessment scores, and socioeconomic status), these researchers identified three psychosocial constructs that have demonstrated incremental validity in predicting the academic performance criterion: academic self-efficacy; achievement motivation; and academic goals. Additionally, six constructs were found to be predictive of the persistence criterion (above and beyond the effects of the traditional predictors): academic goals; academic self-efficacy; institutional commitment; academic related skills; social support; and social involvement. Robbins et al. (2004, p.262) proposed “that the composite of psychosocial and academic-related skill predictors was best understood by three higher order constructs: motivation; academic-related skills; and social engagement”. They also pointed to the limitations of the current empirical research due to the absence of well-constructed measures subsumed under the same constructs and the dearth of studies examining several important motivational constructs that rendered meta-analytical examination unfeasible. Despite these limitations, the work of Robbins et al. provides a framework for guiding the development of a comprehensive psychosocial and skills inventory for predicting college success.

The author would tend to agree with many of the critics of self-theories, in particular with reference to Higher Education, where the factors that influence students achieving their potential are complex and multidimensional. In this regard, and with reference to this study, the work of Robbins et al. is particularly relevant. Their nine broad constructs from the

education persistence models and motivations models of college success provide an excellent framework for HEIs to refine their approach to transition and the broader consideration of the first year induction process.

However, he would argue that such theories can make a significant contribution to students being able to achieve their potential. The pertinent questions are: how many students appreciate the significance of positive beliefs, attitudes and emotions, and have they heard of self-theories or do they recognise that there is more to intelligence than supposedly IQ scores? What influence/impact would it have on students if self-theories were taught in Higher Education? Equally, what would be the impact as a result of academic staff adopting a growth mindset approach towards students?

2.11 Summary

The topics for this literature review chapter are framed within the research questions. The chapter involved reviewing literature related to the Leaving Certificate programme and recent criticisms/debates on same, then moving on to the entry mechanism to Higher Education, with a critique incorporating upcoming changes. The LC programme is the subject of much criticism yet as outlined in the HEA reports on student progression in HE, those students performing well in the LC tend to perform well in HE. The DES has commissioned research to investigate one of the often quoted criticisms that of predictability in LC examinations. This research and a subsequent study recently published found no evidence to support claims of predictability. In fact, the follow-on study suggested that some degree of predictability was essential for building confidence in students as they prepare for these high-stakes examinations. However, are these high-stakes examinations the most appropriate assessment methodology that judges up to six years of post-primary education in a single terminal three-hour examination? The author suggests not, and that the link between the LC examinations and entry mechanisms to HE exacerbates the high-stakes. This in turn leads to an approach to teaching and learning in post-primary that is at variance with the skills and competencies for success in HE and aims almost exclusively at maximising the CAO points score. The conversion of LC examination grades to CAO points as the entry mechanism to HE is fair, transparent and trusted by the wider population. This is a most important

consideration. It is a classic supply and demand model but one which the HEIs control and are reluctant to fundamentally change. The adjustment to the CAO point scoring mechanisms in 2017 will do little to address the underlining issues outlined in the literature. Are HEIs doing enough to address these issues in terms of supports and scaffolding for the transition to HE?

The subsequent sections discussed and transition supports in this field in other jurisdictions and government policy including performance-based funding in an Irish context. These jurisdictions have a much longer gestation with transition related modules and the work of Kemp & Seagraves, Hattie et al., Wingate and Knight & Yorke are of particular relevance to this research. They show that the general explanation for the adoption of these modules generally called 'study skills intervention' is that they are interventions for enhancing learning and the delivery models employed are either embedded or use a 'bolt-on' approach. All the above argue that a contextual approach is key and that learning how to study effectively in HE cannot be separated from subject content and the process of learning. This literature has particular relevance to this study and it should provide a guide for HEIs in the design and delivery of similar modules.

Transition was then examined from an Irish perspective, including an exemplar of the approach taken to the transition related module design in one HEI. The final section provides an overview of evaluation in HE and the theoretical underpinning as well as an examination of self-theories and their role in this field of educational research. The work of Dweck on fixed versus growth mind-sets has many possible implications in this area, in particular their influence on students' self-perceptions. It is possible to develop a growth mindset that, with effort, one simply can achieve more. One has to ask how aware HEIs are of the potential of self-theories. While not the subject of this research an interesting question for another day is the potential impacts of a teacher's self-theory and how it's projected on to students. The next chapter will cover the research methodology employed by the author to achieve the aim of this research project.

Chapter 3 – Research Methodology

3.1 Introduction

This chapter outlines the approach to research utilised to answer the research questions stated below, which guided the focus of the research project. In light of the approach adopted, the chapter commences with the research aim and questions, followed by the research choices that shaped the study, the theoretical paradigm, the research strategy, and the research methods as well as the data analysis tools and techniques. Key literature on all aspects of pragmatism and mixed methods methodology are examined. Each of these elements is discussed in the context of the overall purpose of the thesis. The chapter concludes by way of reference to challenges encountered and ethical considerations that emerged during the research project.

3.2 Research Aim

The aim of this study is to explore the rationale for and to evaluate the value to students of the module(s) designed to support their transition to Higher Education, as adopted by Business Schools in Irish Higher Education Institutions (HEIs).

The research aim is achieved by exploring students' feedback regarding the module(s) and particular aspects of same that have contributed to their development, together with incorporating their views on self-theories, as outlined by Dweck (2012). The justification for the implementation of such modules and the views of academic staff on the Leaving Certificate programme as a suitable preparatory mechanism towards a smooth adjustment to Higher Education are also explored. The final aspect of the research is to develop 'good practice' guidelines for academic staff delivering the module(s) and to provide guidance to Higher Education Institutions considering the implementation process. The research concentrates on Business Schools within three Higher Education Institutions which have adopted such an approach. Two of these Business Schools are in the Institute of Technology sector and the third is University based; this approach was selected with a view to incorporating a comparative aspect to the study.

3.3 Research Questions

The questions which the research seeks to address with specific reference to the transition-related module(s) are as follows:

- 1) What is the rationale for Higher Education Institutions introducing transition-related developmental module(s), and how do such institutions view the Leaving Certificate programme as an appropriate preparatory mechanism for students who progress to Higher Education?
- 2) What are students' overall perceptions of the transition-related developmental module(s), as well as their views on engagement and the learning activities undertaken? The contribution which the module(s) has made to their knowledge and development, including the aspects of the content that they enjoyed and the aspects that could be enhanced, is also explored.
- 3) What are students' views on self-theories within an academic context?
- 4) How do academic staff delivering the transition-related developmental module(s) regard the role, and what recommendations (if any) would they make to a HEI considering the introduction of a similar initiative?

3.4 Research Choices

The research onion, as outlined by Saunders et al. (2009) in Figure 3.1 below provides a graphical overview of the traditional choices facing any researcher. Many researchers, especially those on the initial steps along the road, struggle with research methodology and, in particular, the philosophical choices. The traditional six phases are: research philosophies; research approaches; research strategies; research choices; time horizons; and data collection techniques and analysis procedures. The debates regarding philosophies and approaches have evolved over many years.

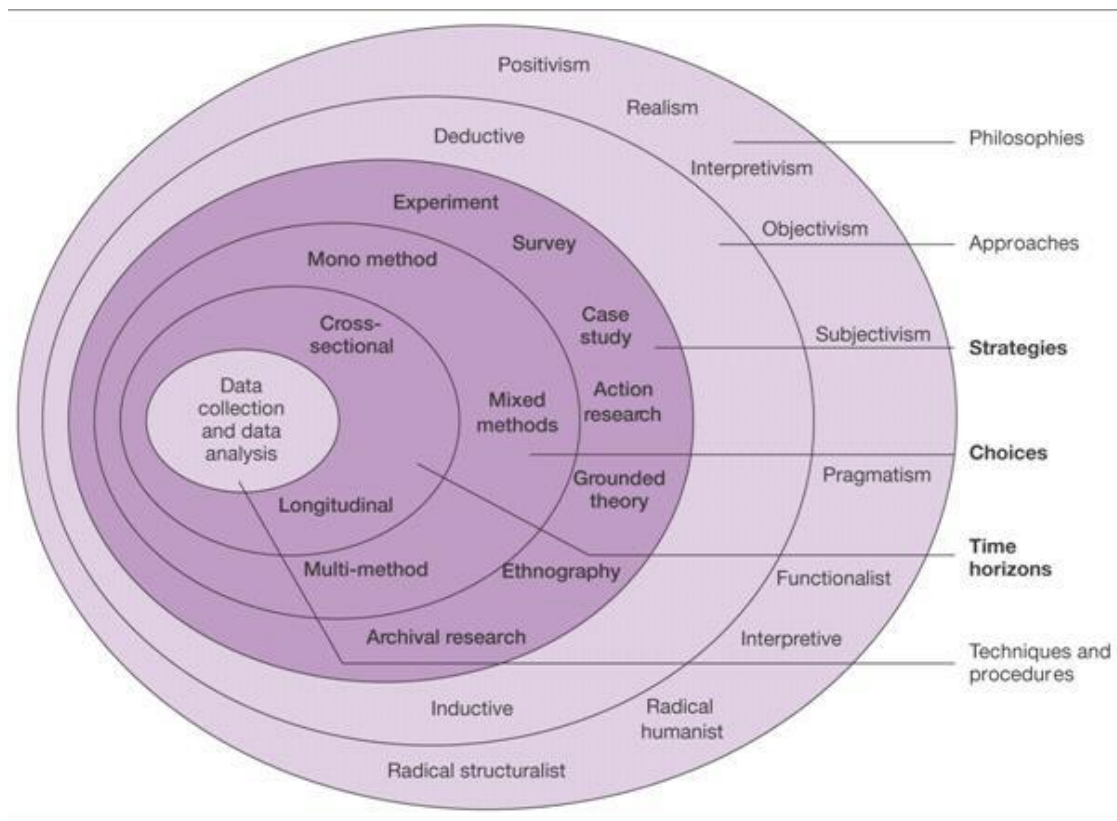


Figure 3.1 - The Research Onion (Saunders et al. 2009, p.102)

The author has engaged in significant background reading to determine the nature of what things are and how we know things. As Johnson et al. (2007, p.113) outline, debates about singular or universal truths or approaches to viewing the world (Socrates, Plato), versus multiple or relative truths (the Sophists, such as Protagoras and Gorgias), versus balances or mixtures of the extremes (Aristotle's "golden mean" or principle of balance, moderate skepticism, Cicero, Sextus Empiricus), go back at least to ancient Western philosophy. The spirit of these debates lives today in the different views expounded with regard to approaches to research. According to Plato, Protagoras said that "man is the measure of all things" and in many ways, the history of Western philosophy is still debating Protagoras and the other Sophists.

This appraisal continues to affect how we view knowledge, what we look for, what we expect to find, and how we believe we are to go about discovering and justifying 'knowledge'. (Johnson et al. 2007). For years, many people accepted that the world was flat; just as

quantitative research was regarded as the only type of valid research. As we all know now, the world is round and the most conclusive evidence to this effect is available in photographs from space. Forms of research have evolved. However, it is unavoidable that theories on both epistemology and ontology would have a competitive ring to them. The debate is often framed in terms of a choice between either a positivist or an interpretivist research philosophy. Lincoln and Guba (1994, p.104) contend that questions of method are secondary to questions of the epistemology and ontology; “both qualitative and quantitative methods may be used appropriately within any research paradigm. Questions of method are secondary to questions of paradigms, which we define as the basic belief system or world view that guides the investigation, not only in choices of method but in ontologically and epistemologically fundamental ways.” As suggested in Figure 3.1. above, even if one accepts the position espoused by Lincoln and Guba, a researcher could be excused for thinking that choosing between one position and the other is somewhat unrealistic in practice as research rarely falls neatly into a single philosophical domain.

3.5 Research Paradigm

As outlined by Creswell (2014, p.21) “the researcher’s intention is to make sense of (or interpret) the meanings others have about the world. Rather than starting with the theory (as in post-positivism), inquirers generate or inductively develop a theory or passion meaning.” Selecting a research paradigm is one of the more difficult challenges facing a researcher. The author transitioned to a career in Higher Education well into his working life, having previously held senior positions in accounting, finance and information technology consultancy, where considerations of epistemology or ontology rarely surfaced. In undertaking a doctoral programme these considerations were front and centre as was the language associated with same. The author’s views are framed by the experience he has gained in the Institute of Technology sector since 2004, in addition to his prior involvement in completing complex information technology projects where adherence to timelines and budgets has parallels with the conduct of research in that answering the research question(s) is the most important task. As Creswell (2014, p.8) points out “researchers recognise that their own backgrounds shaped their interpretation, and they position themselves in the research to acknowledge how their interpretation flows from their personal, cultural and historical experiences”.

The author, based on reading undertaken and personal outlook, developed a strong belief that pragmatism was the most appropriate paradigm for this research project. He is aware of the maxim in research that there is no such thing as 'right' or 'wrong' methodology, only less appropriate or more appropriate in the context of the research topic. Schwandt (2000, 2006) has taken a stronger position on the 'paradigm wars', calling into question the need for the divisions or differentiation and the defining through opposition of qualitative (and other) research. He has pointed out that "it is highly questionable whether such a distinction [between qualitative inquiry and quantitative inquiry] is any longer meaningful for helping us understand the purpose and means of human inquiry" (p.210). Schwandt (2000) further declared the following:

All research is interpretive, and we face a multiplicity of methods that are suitable for different kinds of understandings. So the traditional means of coming to grips with one's identity as a researcher by aligning oneself with a particular set of methods (or being defined in one's department as a student of "qualitative" or "quantitative" methods) is no longer very useful. If we are to go forward, we need to get rid of that distinction (p.210).

Schwandt suggests that the dividing lines are more blurred than typically suggested in the literature and that antagonism between paradigms is both methodologically unnecessary and unproductive. The 'paradigm warriors' also too frequently ignore the presence of many intra-paradigmatic differences. In the context of this research, the author contends that it is useful to identify three research paradigms (quantitative, qualitative, and mixed) to signify three general clusters of methodological and philosophical positions. However, these positions are not nearly as logical and as distinct as is frequently suggested in the literature.

Tashakkori and Teddlie (1998) observe that pragmatism is intuitively appealing, largely because it avoids researchers engaging in what they see as rather pointless debates about such concepts as truth and reality. In their view, one should "study what interests you and use what is of value to you, study in the different ways in which you deem appropriate, and use the results in ways that can bring about positive consequences within your value system" (p.15).

Johnson and Onwuegbuzie (2004) argue that if two ontological positions about the mind/body problem, for example, do not make a difference in how we conduct our research then the distinction, for practical purposes, is not very meaningful. They suggest that some

philosophical difference may lead to important practical consequences, while many others may not. The full set of beliefs characterising qualitative and quantitative approaches as paradigms has resulted in different practices and, based on their observation and study, they believe it is clear that both qualitative and quantitative research have many benefits and associated costs. In some situations, the qualitative approach will be more appropriate; in other cases, the quantitative approach would be more suitable. In many situations, researchers can put together insights and procedures from both approaches to produce a superior product. They advocate a needs-based or contingency approach to research methods and concept selection.

Earlier, Reichardt and Cook (1979) made a plea for programme evaluators to use both quantitative and qualitative methods as methodological paradigms. They pointed out that although specific research methods and techniques are sometimes linked to methodological paradigms it is nonetheless “our view that the paradigmatic perspective which promotes this incompatibility between method types is an error”. They also noted that:

one will often want to sample attributes from each paradigm on the same dimension. For instance, comprehensive evaluations should be process-orientated as well as outcome orientated, explanatory as well as confirmatory. There is no reason for researchers to be constrained to either one of the traditional, though largely arbitrary, paradigm when they can have the best from both (p.18).

In the search for a research approach suitable for this thesis, the author was conscious of selecting the research paradigm that was the most appropriate to answer the research questions, aim and objectives of this study. As already referenced, the overall aim of this project is to evaluate a ‘bridging’ module(s) that assists students with the transition to Higher Education. To create the complete picture required examining the background to the introduction of these modules into Higher Education in Ireland, incorporating both student and staff views of the initiatives concerned. The author decided that a mixed methods approach ‘fits best’ this research. Many (or most) mixed methods writers (Baker 2015; Teddlie & Tahakkaori 2003; Johnson & Onwuegbuzie 2004) argue for some version of pragmatism as the most useful philosophy to support a mixed methods approach. Hence, this research project is framed in the pragmatic paradigm.

3.5.1 Pragmatism

In a research context, Saunders et al. (2007) define pragmatism as “an ontological position that argues that the most important determinant of the research philosophy is the research question, arguing that it is possible to work within both positivist and interpretivist positions. It applies a practical approach, integrating different perspectives to help collect and interpret data” (p. 607). The origins of pragmatism date from the late 1800s, based the work of Peirce, James, and Dewey. Pragmatism is now a well-developed and attractive philosophy for integrating perspectives and approaches as it offers an epistemological justification (i.e. via pragmatic epistemic values or standards) and logic (i.e. use the combination of methods and ideas that helps one best frame, address, and provide tentative answers to the research question[s]) for mixing approaches and methods. A pragmatist rejects an incompatibility thesis and claims that research paradigms can remain separate, as well as being mixed into another research paradigm. He or she would also likely be content with making what Dewey called warranted assertions. As Dewey (1938) put it:

Warranted assertion is preferred to the terms ‘belief’ and ‘knowledge’ because it is free from ambiguity of these latter terms, and it involves reference to inquiry as that which warrants assertion. When knowledge is taken as a general abstract term related to inquiry in the abstract; it means warranted assertability. The use of the term that designates potentiality rather than an actuality involves recognition that all special conclusions of special inquiries are parts of enterprise that is continually renewed or is a going concern (p. 9).

Another attractive feature of pragmatism for mixed methods research is that such an approach includes a wide range of theorists whom mixed methods researchers may consider. For example, Baker (2015, p.13) suggests that pragmatism offers a strong emphasis on research questions, communication, and shared meaning making. She argues that “in connecting theory to data, it uses abduction, which has been found to be particularly useful during the integration stage of mixed methods”, while its emphasis on transferability offers a paradigm that can revise previous or create new disciplinary theories based in a particular context but still generalizable to others. Johnson et al. (2007) generally argue for what they call “pragmatism of the middle as an especially useful philosophy for mixed methods”. They constructed a version of this kind of pragmatism around the ideas of Peirce, James, and Dewey and believe that “one or more of the pragmatisms can provide a philosophy that supports paradigm integration and helps mixed research to peacefully coexist with the philosophies of quantitative and qualitative research” (p.125).

Johnson and Onwuegbuzie (2004) present what they consider to be the most general and important characteristics to facilitate a better understanding of the philosophy of classical pragmatism. Below is an extract from the table which contains twenty-two bullet points.

Characteristics of Pragmatism	
The project of pragmatism has been to find a middle ground between philosophical dogmatisms and scepticism and to find a workable solution (sometimes including outright rejection) to many longstanding philosophical dualisms about which agreement has not been historically forthcoming.	Endorses eclecticism and pluralism (e.g., different, even conflicting, theories and perspectives can be useful; observation, experience, and experiments are all useful ways to gain an understanding of people and the world).
Places high regard for the reality of and influence of the inner world of human experience in action.	Views current truth, meaning, and knowledge as tentative and as changing over time. What we obtain on a daily basis in research should be viewed as provisional truths.
Knowledge is viewed as being both constructed and based on the reality of the world we experience and live in.	Takes an explicitly value-oriented approach to research that is derived from cultural values; specifically endorses shared values such as democracy, freedom, equality, and progress.
Endorses fallibilism (current beliefs and research conclusions are rarely, if ever, viewed as perfect, certain, or absolute).	Offers the “pragmatic method” for solving traditional philosophical dualisms as well as for making methodological choices.

Table 3.1. – Characteristics of Pragmatism (Johnson and Onwuegbuzie 2004, p.19)

The author concurs with the views of Johnson and Onwuegbuzie (2004) that pragmatism provides a practical and outcome-focused method based on action and that it offers a mix that can assist the researcher answer research questions more effectively. They note that:

Discussion of pragmatism by research methodologists and empirical researchers will be productive because it offers an immediate and useful middle position philosophically and methodologically; it offers a practical and outcome-orientated method of inquiry that is based on action and leads, iteratively, to further action and the elimination of doubt, and offers a method for selecting methodological mixes that can help researchers better answer many of the research questions. Pragmatically inclined philosophers and researchers would also suggest that we can reach some agreement about the importance of many values and desired ends such as, for example, preventing the dropping out of school by adolescents, finding effective teaching techniques for different kinds of students, helping to reduce discrimination in the society and attempting to eliminate or reduce mental, learning and other disabilities. In other words, pragmatism takes an explicit values-orientated approach to research. Although we endorse pragmatism as the philosophy that can help to build bridges between conflicting philosophies, pragmatism like all other current philosophies has shortcomings. (p. 17).

The author maintains that, that given the context of the selected approach to the current research assignment and based on the literature of (Johnson et al 2004; Baker 2015), that pragmatism affords the most appropriate theoretical framework for this thesis. However, pragmatism is not without its critics and table 3.2 below outlines some of the weaknesses.

Weaknesses of Pragmatism
Basic research may receive less attention than applied research because applied research may appear to produce more immediate and practical results.
Pragmatism may promote incremental change rather than more fundamental, structural, or revolutionary change in society.
What is meant by usefulness or workability can be vague unless explicitly addressed by a researcher.
Pragmatic theories of truth have difficulty dealing with the cases of useful but non-true beliefs or propositions and non-useful but true beliefs or propositions.
Many come to pragmatism looking for a way to get around many traditional philosophical and ethical disputes (this includes the developers of pragmatism). Although pragmatism has worked moderately well, when put under the microscope, many current philosophers have rejected pragmatism because of its logical (as contrasted with practical) failing as a solution to many philosophical disputes.

Table 3.2 – Weaknesses of Pragmatism (Johnson & Onwuegbuzie 2004, p.19)

A particular weakness cited above i.e. that pragmatism may promote incremental change rather than more fundamental, structured or revolutionary change in society is probably most relevant in the context of this research thesis. The author believes that in the context of educational research incremental change is the most appropriate approach. Education, be it primary, post-primary or Higher does not embrace revolutionary change. Hence, incrementally is the most appropriate way to introduce change and innovative practices. Evolution rather than revolution should be the mantra in education.

3.5.2 Mixed Methods Research

The 20th century started with some use of what later became known as mixed methods research. However, social and psychological research quickly became primarily quantitative

(e.g. as influenced by logical positivism and a reinvigorated scientism). Partially in reaction, many qualitative currents developed throughout the century, coalescing into a qualitative research paradigm in the 1980s and 1990s (e.g. Guba, 1990). In reaction to the polarisation between quantitative and qualitative research, another intellectual movement (focusing on synthesis) occurred and it has come to be called 'mixed methods research'. The author agrees with Johnson et al. (2007) that "we currently are in a three methodological world, with quantitative, qualitative, and mixed methods research all thriving and coexisting" (p.117).

Many theorists describe mixed methods research as the third research paradigm in educational research on the basis that the field should move beyond the qualitative versus quantitative debate. Such a contention stems from the conclusion that both quantitative and qualitative research are important and useful. As outlined by Johnson and Onwuegbuzie 2004, (p.14):

The goal of mixed methods research is not to replace either approach but rather to draw from the strengths and minimise the weaknesses of both in a single research study and across studies. If you visualise a continuum with qualitative research anchored at one pole and quantitative research anchored at the other, mixed methods research covers the large set of points in the middle area. If one prefers to think categorically, mixed methods research fits in a new third chair, with qualitative research sitting on the left side and quantitative research sitting on the right.

The author supports the contention of Johnson et al. that mixed methods research can be visualised as a continuum with qualitative at one end and quantitative at the other. Figure 3.2. below provides a good graphical illustration of same.

Graphic of the Three Major Research Paradigms, Including Subtypes of Mixed Methods Research

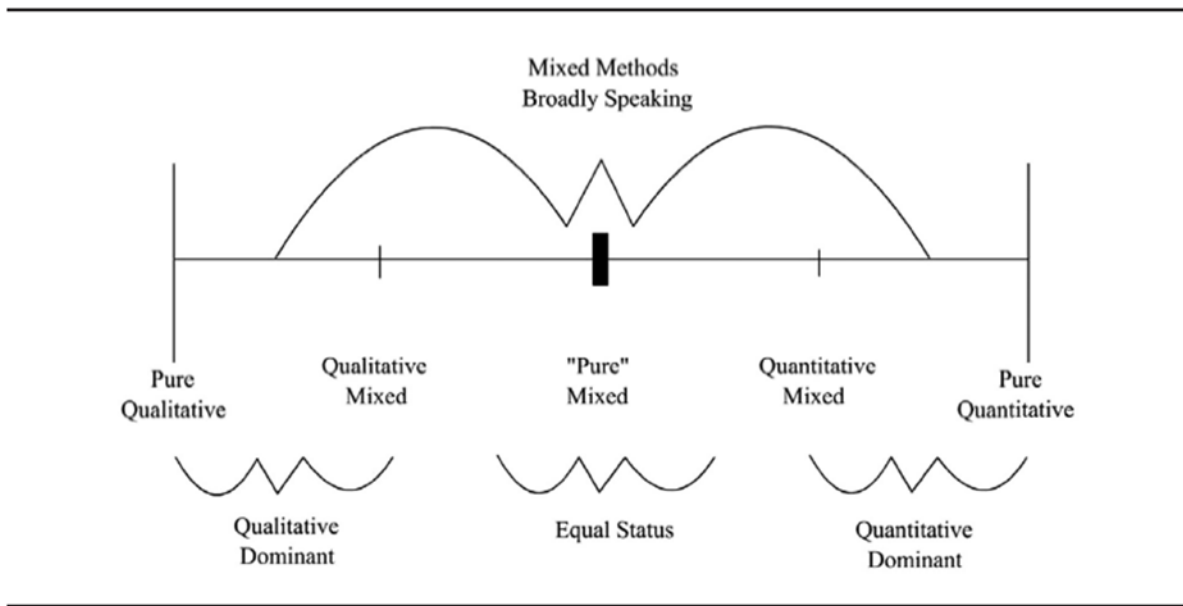


Figure 3.2 – Major Research Paradigms, including sub types of mixed methods research – (Johnson et al. 2007, p.124).

There are many definitions of mixed methods research, with one of the more commonly cited being that by leading educational researcher, John Creswell.

Mixed methods research is an approach to enquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that may involve philosophical assumptions and theoretical frameworks. The core assumption of this form of enquiry is that the combination of qualitative and quantitative approaches provides a more complete understanding of a research problem than either approach alone. (Creswell 2014, p.14).

Johnson et al. (2007, p.129) in their 'Towards a definition of mixed methods research' paper cite definitions from nineteen educational research methodologists. At the conclusion of the research paper, they state their definition:

Mixed methods research is an intellectual and practical synthesis based on qualitative and quantitative research; it is the third methodological or research paradigm (along with qualitative and quantitative research). It recognises the importance of traditional quantitative and qualitative research but also offers a powerful third paradigm choice that often will provide the most informative, complete, balanced, and useful research results. Mixed methods research is the research paradigm that

- a) partners with the philosophy of pragmatism in one of its forms;
- b) follows the logic of mixed methods research (including the logic of the fundamental principle and any other useful logics imported from qualitative

- or quantitative research that are helpful for producing defensible and usable research findings);
- c) relies on qualitative and quantitative viewpoints, data collection, and analysis, and inference techniques combined according to the logic of mixed methods research to address one's research question(s);
- d) is cognisant, appreciative, and inclusive of local and broader sociopolitical realities, resources, and needs.

Furthermore, the mixed methods research paradigm offers an important approach for generating important research questions and providing warranted answers to those questions. This type of research should be used when the nexus of contingencies in a situation, in relation to one's research question(s), suggests that mixed methods research is likely to provide superior research findings and outcomes.

The author concludes that the above extract provides a comprehensive definition of mixed methods research and its evolution. As with all research choices, mixed methods has its critics. The following table by Johnson and Onwuegbuzie (2004) sets out the strengths and weakness of mixed methods research.

Strengths and Weaknesses of Mixed Methods Research	
Strengths	Weaknesses
Words, pictures, and narrative can be used to add meaning to numbers.	Can be difficult for a single researcher to carry of both qualitative and quantitative research, especially if two or more approaches are expected to be used concurrently; it may require a research team.
Numbers can be used to add precision to words, pictures and narrative.	Researcher has to learn about multiple methods and approaches and understand how to mix them appropriately.
Can answer a broader and more complete range of research questions because the researcher is not confined to a single method or approach.	Methodological purists contend that one should always work within either a qualitative or quantitative paradigms.
Researchers can generate and test grounded theory.	More expensive.
A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study.	More time consuming.
Qualitative and quantitative research together produce more complete knowledge necessary to inform theory and practice.	Some of the details of mixed research remain to be worked out fully by research methodologists (e.g., problems of paradigm mixing, how to qualitatively analyse quantitative data, how to interpret conflicting results).
Can add insights and understanding that might be missed when only a single method is used.	
Can provide strong evidence for a conclusion through convergence and corroboration of findings.	

Table 3.3 – Strengths and Weaknesses of Mixed Methods Research (Johnson and Onwuegbuzie 2004, p.21)

In addition to the above table, ‘incompatibility thesis’ represents the main criticism of mixed methods research arising from the conclusion that both qualitative and quantitative research are associated with two distinct paradigms they are incompatible with each other. Sale et al. (2002) assert that “because the two paradigms do not study the same phenomena, quantitative and qualitative methods cannot be combined” (p.43). However, Howe (1988)

provides a convincing rebuttal of this contention. He supports the view that, far from being incompatible, combining quantitative and qualitative methods is good and that “there are important senses in which quantitative and qualitative methods are inseparable” (p.10).

3.5.3 Rationale for Choosing Mixed Methods

In determining an appropriate research methodology, the author was cognisant of making the most appropriate research choices to answer the research questions. As this research project seeks to investigate module(s) that support the transition to HE from a multifaceted perspective, selecting the research methods that aligned best to the research questions (as outlined in section 3.3 above) was the overarching concern. As this exploratory study seeks the views of academic staff who deliver the module(s), feedback from students who have undertaken the module(s) and those who developed and/or were drivers of its implementation, the author maintains that a single research approach would be inappropriate. The most obvious solution from the author’s perspective was a mixed methods strategy. This allowed the use of the quantitative approach as the most appropriate to answer some research questions, with the qualitative method being more suitable for others.

In seeking literature sources to justify such an approach, the papers by Johnson et al. (2004, 2007) as cited above provide valuable confirmation in this regard. The strengths and weaknesses, as outlined in Table 3.3 above, reinforced the author’s view that mixed methods was most appropriate for this research project. Three strengths, in particular, augmented the justification:

- 1) A researcher can use the strengths of an additional method to overcome the weaknesses in another method by using both in a research study;
 - 2) It can provide strong evidence for a conclusion through convergence and corroboration of findings;
 - 3) It can add insights and understanding that might be missed when only a single method is used.
- (Johnston and Onwuegbuzie 2004, p.21)

In the context of this research, the views of Guba and Lincoln (1989) are deemed relevant in that they assert that “the information may be qualitative or quantitative. Responsive evaluation does not rule out quantitative modes, as mistakenly believed by many, but deals with whatever information is responsive to the unresolved claim, concern or issue” (p. 12). They developed their theory further in (2005) when they posed and answered the following question:

Is it possible to blend elements of one paradigm into another, so that one is engaging in research that represents the best of both worldviews? The answer, from our perspective, has to be a cautious yes. This is especially so if the models (paradigms) share axiomatic elements that are similar, or that resonate strongly between them (p. 201).

According to Greene (2007), the overall purpose of using mixed methods in a single study to gather and analyse data is “to develop a better understanding of the phenomena being studied” (p.98). She advocates that using a mix of methods as part of an empirical study will generate more comprehensive data and provide the researcher with a broader context of the data being studied. This can add research rigour and can mean “getting it right, enhancing the validity and credibility of our findings” (p.98).

Having highlighted a discussion on the various research paradigms and presented an outline history of their development and use across various research disciplines, the author now moves to a more specific treatment of the methods employed in this research project.

3.6 Research Methods

3.6.1 Questionnaire Design

In designing the questionnaire, the author was conscious of the various stakeholders, in particular the academic staff teaching the module. The use of a standard survey tool, such as the Student Evaluation of Teaching (SET) as outlined by (Millea and Grimes 2002) could potentially have been in breach of national agreements on the mechanisms for obtaining student feedback. In addition, there has been a landmark legal case within the Institute of Technology sector where an Institute was successfully sued by a member of academic staff over student comments in a questionnaire distributed within the institution.

The questionnaire employed in this research was designed with reference to the Australian Survey of Student Engagement (AUSSE), which also informed the design of the Irish Survey of Student Engagement (ISSE) now in use for four years in Higher Education Institutions in this country. In framing the questions, an attempt was made to blend elements of the student engagement and student evaluation questionnaires most applicable to the environment being researched. In addition, there were a number of questions included as specific to the context of the module. The initial questions were general profile related e.g. gender, age within bands, the HEI, year of study. Question no. 6 asked students to outline their attendance level at relevant lectures, and question no. 7 covered their overall rating of the module. Question no. 8 (a) related to how many hours per week the students engaged in academic activities; this was followed up by part (b) which asked how did this compare with the amount of study undertaken for the Leaving Certificate examination. Questions numbers 9 to 14, inclusive sought students' views on various aspects of the module with a Likert Scale ranging from 1 to 5 options with variations included. Question no. 15 focused students' view of self-theories based on a similar question used by (Dweck 1999) and (Knight and York 2007) in evaluating individuals' perceptions of a fixed versus a growth mindset. There were 7 statements with a ranking score from 1 to 6, with 1 equating to 'strongly agree' and 6 to 'strongly disagree'. Questions numbers 1 to 15 were quantitative in focus, with questions 16 and 17 being qualitative and open-ended that sought students' responses regarding on the best features of the module(s) and the aspects that could be improved/ amended to enhance its relevance and effectiveness. The final version of the student questionnaire is included in [Appendix B](#).

It was essential to avoid any questions that could be construed as controversial. Consequently, inputs to the questionnaire design were sought from academic staff who teach the relevant module in the author's home Institute. Thus, the lecturers involved in teaching the module were emailed a draft copy of the questionnaire and invited to attend a meeting to provide their feedback. The email explained the background and reasons for undertaking the study and sought staff input to the questionnaire design process. Prior to sending the email, the author had informal conversations with a number of the academic staff involved in order to share his plans. The aim of these conversations was to obtain feedback from the staff delivering the module, albeit they would not be taking an active part in the research, merely being in a position to make a contribution to questionnaire design. These conversations resulted in amendments to a number of questions. The questionnaire was then piloted with a small group of twenty first-year students in the author's home Institute; selected on the basis of convenience, i.e. a single class group was chosen. The pilot exercise did not highlight any problems and confirmed the estimated time required to complete the survey.

3.6.3 Research Sampling Strategy

There are a number of alternatives to consider when choosing the sampling strategy to deploy in any research project. Researchers may employ either probability or non-probability sampling approaches. The decision regarding which type of sampling to use is often based on factors such as the amount of rigour involved, the characteristics of the target population, and the availability of participants. In this context, suitable guidelines included the following:

In probability sampling, the researcher selects individuals from the population who are representative of that population. This is the most rigorous form of sampling in quantitative research because the investigator can claim that the sample is representative of the population and, as such, can make generalisations of the population. Within probability sampling, there are three strategies to choose from: simple random sampling, stratified sampling and multi-staged cluster sampling. (Creswell 2014, p.163)

It would have been preferable to adopt simple random sampling approach which is the most popular and rigorous form of probability sampling. However, the typical process involved in using a simple random sample begins with assigning a number to each site in the research; then it is necessary to refer to a random numbers table from a relevant statistics textbook before selecting the individuals for the sample. For this procedure, one requires a list of members in the target population and a number must be assigned to each individual. As this

data collection element was being undertaken on specific days in two sites it would not be possible to target individuals for participation.

Thus, it was necessary to engage in non-probability sampling which involves the researcher in selecting individuals because they are available, convenient, and represent some characteristic which the investigator seeks to study. In some situations, one needs to involve participants who volunteer and agree to participate. Furthermore, one may not be interested in generalising findings in a population, but rather merely describing a small group of participants in the study. It might be appropriate to calculate descriptive statistics on the samples and to compare these with the larger population in order to make inferences from the sample to the population. Within non-probability sampling, two approaches are available to the researcher i.e. convenience and snowball sampling:

In convenience sampling, the researcher selects participants because they are willing and available to be studied. In this case, the researcher cannot say with confidence that individuals are representative of the population. However, the sample can provide useful information for answering questions and hypotheses (Creswell 2014, p.164).

The author employed a convenience sampling strategy in the knowledge that he would be visiting the sites in question on given days and would be requesting participants to volunteer to participate in the research by completing the questionnaire. Restrictions, due to work commitments, influenced the days on which he could visit the research sites to undertake data collection; hence, convenience sampling represented the most practicable sampling strategy to employ.

However, during the data collection phase, student attendance at lectures proved to be much less than anticipated. Consequently, if a reasonable sample size was to be achieved, an additional strategy would have to be adopted. In addition to the convenience sampling approach, it was necessary to engage in snowball sampling, whereby the researcher asks participants to identify others to become members of the sample. In general conversation with the academic staff, whose lecture time the author was imposing upon to undertake the data collection, a number commented on the poor student attendance. In some cases, they were able to suggest reasons for the low turnout and offered to take some questionnaires for student completion in a future lecture and then post the responses back to the author. He

was appreciative of the suggestion which was accepted in all cases. However, this involved forwarding on sufficient numbers of blank questionnaires to the academic staff member concerned. Prior to employing the snowball sampling, the author contacted the relevant Heads of Department to ensure they were agreeable to this change in approach. They concurred fully.

Sample size has been a concern since the commencement of this research study. In the case of site one, the relevant transition-related module has been offered for the past five years. In site two, the module has been provided for four years. The total population is, in theory, all registered students in the respective Business Schools who undertook the module in year one. However, many students will not have undertaken first-year studies in the sites being researched, for any of the following reasons:

- a) They may have transferred from a further education programme elsewhere;
- b) They may have come from another HEI which does not offer this module;
- c) They may be classified as Erasmus or other exchange student.

In both sites being researched, the module has been offered for at least four years. Thus, the total population is all current students who have undertaken the relevant module in year one of their studies in Higher Education.

3.6.4 Questionnaire Deployment

The methodology to employ in terms of distributing the questionnaire was another decision to be made. The overriding determining factor was which method would yield the best response rate. The choices available were to use a web-based online electronic distribution or to undertake a manual collection by visiting students in class. While an online electronic data collection approach offers an easy, quick form of data collection, it does provide challenges such as identifying the email addresses of the participants not to mention the generally low level of response rates to such an approach. There can also be issues with regard to data validity. The challenge of identifying the email addresses could possibly have been overcome by requesting the Heads of Department to forward a link to the questionnaire on to the student population. However, the author was of the opinion that the response rate for an electronic-based questionnaire would be extremely low, especially as the questionnaire is

quite long and takes in the region of 15 minutes to complete. Evidence to support this conclusion comes from the results of the Irish Survey of Student Engagement (ISSE). Since its introduction in 2014, all HEIs in Ireland have participated in the ISSE, an online, electronically administered instrument. This survey receives significant institutional-level support and promotion, yet there has been a low participation rate (the national average response rate for 2014 to 2016 was 22%). In the context of the current research project, it was not possible to invest in the level of promotion required to generate awareness among the target student population. Another limiting factor from personal experience is the fact that many students do not check their Institute-based email but prefer to use a personal email which in the IoT sector is not integrated with their Institute email.

Manual data collection is also a challenge, as it proved to be the case. Taking all these factors into consideration, the author determined that manually distributing the questionnaires in class would be the most appropriate option and provide the best opportunity in terms of obtaining a reasonable response level.

3.6.5 Data Collection Plans – Questionnaire and Interviews

The plan was to undertake data collection in two Institutes of Technology and in one University. However, as the process unfolded, elements of the data collection plan proved to be a significant challenge and had to be modified to enable completion. The intention was to utilise a questionnaire with students who had undertaken the module(s) and to interview academic staff involved either as drivers of module implementation or as teachers of said module in the three HEIs. Suitable sites were identified on the basis that they had a mandatory transition-related module and short listed based on geography to three. Initially, informal approaches were made to the relevant senior academic staff to determine if it would be possible to undertake the research and to establish whether additional ethical approval would be required. This involved a telephone call to the Academic Registrar/Dean of Faculty in which the background to and aim of the research study were outlined. Based on positive feedback from the initial contacts, the next step was to gain formal permission and seek any additional ethical approval required for outside researchers. The formal process in the two IoTs involved contacting the Academic Registrars via email outlining the research aim, objectives and rationale for the project. This email included a copy of the research approval

from the HEI under the auspices the author is undertaking his doctoral research, as well as the proposed questionnaire for students and the interview questions for staff. In both cases, following a short exchange of emails to clarify a number of points, approval was granted. Both IoTs were willing to accept the Dublin City University Ethics Committee approval and did not require the research application to undergo a further ethics validation process. Permission was then granted to contact the relevant staff so that the research might commence.

In the case of the University, the application for approval to undertake the research proved significantly more challenging. The formal approach to the Dean of the Business School incorporated the same information as indicated above. A number of telephone calls and emails led to a response being received via the Head of Research. This was most beneficial and explained the process within the University for seeking approval to undertake research, in particular, research that involved students. As requested, the author contacted the Office of Research Ethics where the staff member was again most helpful and forwarded details of the relevant documentation required by the Ethics Committee. It was suggested that the author complete the details, and the Office offered to review same based on prior experience of bringing research proposals to the Ethics Committee for approval. Completion of the necessary documentation was a time-consuming process.

In parallel, the author contacted the relevant Head of Function and the director for the programme which he had identified as suitable for data collection purposes. There followed a series of phone calls and emails to the Head of Function and Programme Director in response to requests for additional information. They had a number of concerns in relation to the proposed questionnaire to be used to elicit feedback from the students, in particular, questions which related to the academic staff responsible for delivering the module. The author offered to remove any questions related to academic staff. Following a series of emails, they were amenable to participating in the qualitative aspects of the research, and the study Programme Director and lecturer delivering the module agreeing to be interviewed.

However, it was not possible to reach agreement on undertaking the quantitative element with the student population who would have completed the relevant module in year one of their studies. The author understands the reasons, but this was a setback to the research

project as a proposed element of the original design was to conduct a comparison of the responses from students within the two main Higher Education sectors in Ireland i.e. Universities and Institutes of Technology and in particular to identify whether there were any differences in their feedback regarding the value of such modules and the assessment of self-theories. While the author was disappointed with this outcome, he accepted it as part of the research process and moved on to the data collection in the other sites. Given that University students would not now be participating this research, approval from the Research Ethics Committee was not necessary.

The next step in the data collection process was to contact the Heads of School in the two IoTs. This was done via a telephone call, followed up with an email explaining the background to the research and the level of assistance being sought from the School. In each case, the Head of School was agreeable to participating in the research and requested that the author contact the relevant Heads of Department to organise the logistics surrounding the data collection. This was the next stage. Again, the approach was an initial telephone call followed up with an email. In all cases, the relevant staff were most cooperative in assisting to identify suitable class groups within which to distribute the questionnaire. The logistics for the manual data collection with students required details of the programme/course, the year of study, the module, the lecturer's name, the time, the room, and approximate class size (as outlined in Table 3.4 below). To assist with the preparation for the data collection, this template was emailed to the Heads of Department. They were requested to complete and return it. The other task performed on the author's behalf was to contact the lecturers whose classes he would be visiting to inform them that the data collection would be taking place at the agreed date and time. The information supplied was based on the author's knowledge of the information required when visiting a class group.

Schedule for data collection on 16.04.15							
Programme/Course	Code	Year	Module	Lecturer	Time	Room	Approx class size
BB in XX	1	2	Business Information Systems	John Bloggs	11am	837	35
BA (Hons) in XX	2	2	Financial Management	Joe Bloggs	2pm	366	70
BB (Hons) in XX	3	2	Strategic Management	Mary Bloggs	3pm	223	40
BB (Hons) in XX	4	3	Systems Analysis	Niamh Bloggs	4pm	209	70
BB (Hons) in XX	5	4	Project Mgt	Anne Bloggs	5pm	223	85
							300

Table 3.4 – Schedule for data collection in site 1

3.6.6 Data Collection, the reality- Questionnaire

The first day scheduled for data collection in site 1 was 16 April 2015. The Head of Department had contacted each member of academic staff whose class group the author would be visiting to inform them that the questionnaire would be distributed either in the first 15 minutes or the last 15 minutes of class time. The schedule for the day involved visiting five class groups, commencing at 11am with the final group scheduled 5pm. The timing of the distribution of the questionnaire was a key factor and the author had engaged with the Heads of the Department to agree a suitable time. In site 1, the academic calendar includes pre-Christmas examinations in semester 1, thus, the teaching in semester 2 commences in early January and finishes at the end of April. There are 12 teaching weeks in semester 2. In consultation with the Head of Department week 10 was identified as the optimum week for distribution of the questionnaire. Site 2 has a different academic calendar with semester 1 examinations taking place in January and semester 2 teaching beginning in early February. As with site 1, the teaching period in semester 2 is 12 weeks. Thus for site 2 the plan was to undertake the distribution of the questionnaire in early May 2015.

On the scheduled day in April 2015 the author visited site 1 and met with the first class group at 11am (as planned) taking the first 15 minutes of class as arranged. However, out of a possible attendance of 35 students only 16 students were present. This trend of low attendance continued for the entire visit. By the end of the day, there 82 completed

questionnaires from a possible population of 300. The level of attendance was very disappointing (and the author was somewhat disheartened), as outlined in Table 3.5 below. However, attendance by students at lectures is not something that can be controlled. The situation was not helped by the fact that it was an unseasonably hot day for April, with students possibly opting to enjoy the good weather rather than attend lectures. Following a discussion with the Heads of Department, it was agreed that the author would organise to undertake the data collection again in semester 2 of the next academic year with a view to increasing the response rate. He followed up with all the lecturers visited during the data collection process to thank them for allowing access to the class group. A similar email was sent to the Heads of Departments without whose assistance the data collection would not have been possible.

Results of data collection in stie 1 - 16.04.15									
Programme/Course	Code	Year	Module	Lecturer	Time	Room	Approx class	In class	Completes
BB in XX	1	2	Business Information Systems	John Bloggs	11am	837	35	16	14
BA (Hons) in XX	2	2	Financial Management	Joe Bloggs	2pm	366	70	27	24
BB (Hons) in XX	3	2	Strategic Management	Mary Bloggs	3pm	223	40	28	23
BB (Hons) in XX	4	3	Systems Analysis	Niamh Bloggs	4pm	209	70	38	12
BB (Hons) in XX	5	4	Project Mgt	Anne Bloggs	5pm	223	85	25	9
							300	134	82

Table 3.5 – Results of data collection site 1

Based on the low attendance in site 1, the author consulted with the Heads of Department in site 2 to determine an optimum time for student attendance. He was keen to avoid a repeat of the site 1 scenario. The Heads of Department had noticed a significant drop off in attendance in the previous couple of weeks. Thus, rather than undertaking the data collection as planned in week 10, it was agreed it would be postponed until early in semester 1 of the 2015/16 academic year.

3.6.7 Data Collection - Questionnaire - round 2

Given that the start of the academic year is a busy period, it was arranged with the Heads of Department in both sites that the target dates would be in October 2015. The dates agreed via email for undertaking the data collection were 15th October in site 1 and 8th October in site 2. In preparation for the visits, the Heads of Department identified the class groups, times for the visits (as per Table 3.5 above) including contacting the relevant academic staff to inform them that their class group would be visited either in the first or last 15 minutes of the lecture on that date. A schedule of visits was drawn up based on the information supplied by the particular Head of Department. The schedule for the site 2 visit on 8th October involved a total student population of 300. In preparation for the visit, the author photocopied the required number of student questionnaires. On 8th October, the author arrived in ample time to meet with the first class group, paying a courtesy visit to the Head of Department who had assisted with developing the schedule. The first three class visits went very well, with a good attendance by students and very few who were ineligible to complete the questionnaire, as mentioned earlier, the main reasons for non-eligibility were that the students concerned had transferred directly into second year or were Erasmus exchange students who could not have completed the relevant module in year one. By lunchtime, the author was very content and well on track to collect a substantial number of responses. However, the afternoon was completely different, as the level of attendance dropped off and of those who were present a number were not eligible to complete the questionnaire. By the end of what proved another frustrating day of data collection, the author had received 132 completed questionnaires from 138 eligible students who were in attendance out of a potential 300 respondents. The author again followed up with all the lecturers visited during the data collection process to thank them for allowing him access to the class group.

The second visit to site 1 took place on 15th October and again the author engaged with the Head of Department with regard to the class groups to be visited. The Head of Department had identified the student cohorts and contacted the relevant academic staff to inform them that the author would be visiting on that day. As with the visit to site 2 during the previous week, the author paid a courtesy call to the Head of Department who had assisted with the scheduling process. During this visit, the attendance was small in the first class group. In the second class group, the academic staff member had an assessment scheduled and requested

that the author return on another day. The relevant academic staff member apologised for the confusion as he had forgotten to inform his Head of Department of the scheduled assessment. However, he did offer to distribute the questionnaires to the students in another class and forward their feedback to me at a later date. In total, by the end of the day, the author had 44 completed questionnaires from 66 eligible students who were in attendance out of a possible 140 respondents. In discussions, with two members of academic staff (while the students were completing the questionnaire) offered to distribute the questionnaire on a day when the attendance would be much better. As a follow-up to the visit to site 1, the author forwarded hard copies of the questionnaire to those members of academic staff and about 10 days later received 34 completed questionnaires in the mail.

A number of academic staff members from site 2 sent replies to my follow-up thank you email, offering to distribute the questionnaires in their class groups on days when student attendance would usually be improved. As a result of these and similar offers received when in site 1, the data collection process for the questionnaire morphed into snowball sampling. The author sent the requested number of questionnaires in the post to the academic staff who volunteered to assist with the data collections, and over the few weeks, a steady number of completed questionnaires arrived via the postal service.

3.6.8 Data Collection – Interviews

The plan for data collection based on interviews with academic staff who teach the module and staff who were drivers of the module being implemented was relatively straightforward in comparison with the planning required for the student questionnaire distribution. In the sites where data was being collected, the Heads of Department or study Programme Director was contacted to obtain the names of academic staff members who taught or are currently teaching the relevant transition-related module. In site 1, three academic staff members delivered the particular module; in site 2 it was also three, and in site 3 the number was one. In sites 1 and 2 the author planned to interview two staff members while in site 3 one staff member. In all cases, interviews were confined to a maximum of two people who were the drivers behind the adoption of such a module. The author emailed the relevant staff and followed up with telephone calls. Table 3.6 below illustrates the number of academic staff interview as part of the qualitative data collection phase.

	No. of interviews with academic staff who deliver the module	No. of drivers of the implementation of the module
Site 1	2	1
Site 2	2	1
Site 3	1	2

Table 3.6 – Schedule of interviews undertaken during this Research Study

In total, nine interviews were planned, five with academic staff who deliver the module and the remainder with academic managers responsible for and/or drivers of the implementation. The interview planning and implementation process happened without any hiccups. Academic staff and managers were most generous with their time. The interviews were semi-structured in nature, with minor changes to the questions asked of academic staff versus those presented to drivers of the implementation process. By way of preparation for the interview, the author had undertaken background reading on interview techniques. Among the most informative sources were Seidman 2006 and Denscombe 2010; an interview protocol was developed with reference to the Seidman guidelines. The questions asked of the interviewees is included in [Appendix C](#).

The interviews (with one exception) were undertaken in the workplace of the interviewees; the exception being conducted at the home of the academic staff member. These were recorded on a digital device as well as the voice memo feature on the author's iPhone as a 'belt and braces' approach. The recordings on the iPhone proved most useful, as the author spends a significant amount of time commuting and was able to replay the voice memo via the car radio.

3.6.9 Data Entry

The next stage in the data collection process was to enter the responses from hard copy questionnaires into an online data collection tool. The tool utilised for this purpose was 'survey monkey'. The reason for choosing survey monkey is the level of functionality of the software, the ease of use, and the fact that the author already had a subscription level that enables the advanced features of the software. The questionnaire was replicated on the online tool, and inputting the hard copy results took on average five minutes per questionnaire. While this was a time-consuming task, it did provide an opportunity to understand the data and identify patterns that might emerge during the data analysis process. The survey monkey tools provided good quality, descriptive statistics in terms of output. In addition, the results can be transferred easily into Excel or SPSS format for more advanced analysis.

3.7 Ethical Considerations

Blumberg et al. (2005, p. 8) define ethics as the "moral principles, norms or standards of behaviour that guide moral choices about our behaviour and our relationship with others". Denscombe 2010 (p. 330) outlines the principles that govern research ethics, as follows

The code of ethics for social research sticks to the core principle (that in their pursuit of knowledge social research must not ruthlessly use any means at their disposal). Social researchers are expected to conduct their investigations in a way that:

- protects the interests of the participants;
- ensures that participation is voluntary based on informed and based on informed consent;
- avoids deception and operates with scientific integrity;
- complies with the laws of the land."

The author referenced an ethical framework for student evaluation (McCormack, 2005) to ensure that the ethical dimension was examined from all aspects. This research project was considered and approved by the Research Ethics Committee (REC) in Dublin City University, as referenced earlier. The approval process by the REC required a submission under the low-risk projects process and included both a plain language statement and an informed consent form. All students who participated in the research study were given a full explanation of the

background to the research, and the purpose for which the results would be utilised. They were assured of total confidentiality in relation to the data collected. All participants granted permission for the data to be used. Similarly, the academic staff who were interviewed were given a plain language statement and an approved consent form to sign prior to the commencement of the interview. These forms and the interview questions were emailed in advance to ensure that interviewees had sight of them and any questions or clarifications could be addressed in advance of the interviews taking place. They were provided with details of how the interviews would be conducted, with recordings being made and the transcription of same taking place with their agreement. They were also told that they could request a copy of the interview transcript and make any changes required. An assurance was provided by the author that he would take all necessary precautions to ensure their anonymity and that all notes, recordings and transcripts would be stored in a secure location.

3.8 Data Triangulation

Triangulation, according to Mertens (2012, p.75), is a measurement technique employed by “surveyors or astronomers to locate an object in space by relying on two known points in order to triangulate on an unknown fixed point in that same space”. The concept has been borrowed by researchers to aid the validation process in assessing the veracity of research results. Thus, it is common within a research study to employ two or more data collection methods that can assist with addressing any perceived bias and help to strengthen the rigour and validity of the research. Bryman (2007, p.8) writes that triangulation is useful within a research study “in terms of adding a sense of richness and complexity to enquiry” and adds that the use of triangulation can add confidence to the study findings. A single method can never adequately shed light on a phenomenon. Using multiple methods can help facilitate a deeper understanding. This study has used methodological triangulation, as described by Denzin (1978), employing two different methodologies; questionnaires and interviews, to research the same subject and address the same research problem. Denzin describes several ways that triangulation can be used within a study either to gather or to analyse data. He outlines his theories and lists the different types of triangulation by depicting four forms as follows:

- *Data triangulation*: involves time, space, and persons;
- *Investigator triangulation*: involves multiple researchers in an investigation;
- *Theory triangulation*: involves using more than one theoretical scheme in the interpretation of the phenomenon;
- *Methodological triangulation*: involves using more than one method to gather data, such as interviews, observations, questionnaires, and documents.

(Denzin 1978, p.12)

Within this research study, the questionnaire design incorporated the use of open comment box questions on the best aspects of the module in order to enable qualitative triangulation with earlier quantitative questions on the areas of the module emphasised and elements that contributed to students' development. Analysis of the different methodologies to answer the same research questions is intended to strengthen validity of the research methodologies deployed. The use of both approaches provided the researcher with the opportunity to verify both datasets against each other, which strengthened the study findings.

3.9 Data Analysis Strategy

The data analysis strategy is framed within the research questions, with the pragmatic outlook being the theoretical lens from which the analysis is conducted. The questionnaires, as outlined in section 3.6.5, were administered via paper-based completion. The author visited the classrooms and waited while the students undertook the task. For the purpose of analysis these required conversion to electronic format, and as outlined the survey tool, 'survey monkey' was employed for this purpose. The author manually entered all data to 'survey monkey'. While this was a time-consuming process, it provided the opportunity to view initial trends within the dataset. The survey monkey tool allows for export options to various formats including Excel and SPSS. Both were utilised at various stages. Excel was used for the cleaning of the data, in addition to producing the graphs utilised in chapter 4. SPSS was utilised to calculate the descriptive statistics and in-depth analysis (both Pearson Chi-squared analysis and 95% confident intervals, where applicable). The analysis of the data gathered in response to question 15 required the calculation of a weighted score and this additional scale-based calculation was undertaken using the compute variable function of SPSS. The author had

previously undertaken a training course on how to use SPSS and this, combined with his use of the software for analysis work associated with the Irish survey of student engagement (ISSE), meant that he was both familiar with and comfortable using the software. The open-ended responses to questions 16 and 17 i.e. the best aspects and areas identified for enhancement were analysed using the coding and teaming techniques as outlined by Creswell.

In terms of analysing the interviews consideration was given to using Nvivo software as the doctorate programme had included a two-day Nvivo training course which provided an excellent insight into the features and potential of using this software. After some consideration, the author decided that a traditional manual approach (again using coding and theming techniques) should be employed to analyse the data using thematic analysis as a suitable methodology. This method comprises an increasingly substantial group of data analysis methods, variously termed qualitative content analysis or thematic analysis (Gale et al. 2013). These approaches seek commonalities and differences in qualitative data, then focusing on specific relationships within and between different components of the data. Once this is achieved, the researcher attempts to draw descriptive and/or explanatory conclusions clustered around meta themes and sub themes. This manual approach included listening and relistening to the recordings of the interviews during the author's daily commute to enhance his understanding of the themes that had emerged.

3.10 Summary

This chapter has described the research paradigm and methodology framework which scaffold this research and provided details of the methods employed to gather data to answer the research questions. It confirms that this research was subject to approval from the Research Ethics Committee of Dublin City University. The chapter commenced with stating the research aim and questions. Next, it provided the rationale for taking a pragmatic approach with a mixed methods methodology framework being adopted following a discussion with regard to the literature on same. The questionnaire design and deployment, including the rationale and the method of participant selection, were discussed; with challenges encountered during the quantitative data collection phased explained. The protocol for qualitative data collection was set out along with the data analysis strategy

providing details on how both the quantitative and qualitative data were analysed. Finally, the chapter discussed how ethical considerations and triangulation were incorporated into the research design and planning process. The next chapter will focus on the findings from the research methods employed during the study.

Chapter 4 – Research Findings

4.1 Introduction

This chapter presents the key findings of the data collected via the research methods, as discussed in the previous chapter. Findings will be discussed in the context of the research questions as they relate to the overall aim of this study. The full coverage of the questionnaire results is included in summary [Appendix E](#).

4.2 Findings

The research outcomes are presented within the framework of the research questions, with the qualitative findings addressing research questions 1 and 4 plus an element of question 2, and the quantitative findings related especially to research questions 2 and 3.

4.2.1 Finding 1: Rationale for the introduction of Transition Related Module(s) and views on the Leaving Certificate Programme as preparatory mechanism for Higher Education

This research question sought to determine the rationale for HEIs introducing transition-related developmental modules, and their perceptions of the LC programme as an appropriate mechanism in terms of preparation for students who progress to HE. To answer the initial element of this question, interviews were undertaken with relevant senior management and/or individuals who were identified as playing key roles in the adoption of these transition-related modules across the HEIs included in this research study. Those interviewed included the Academic Registrars, Deans, Academic Staff and Project Managers within the respective institutions. Academic staff who deliver the transition-related module(s) were asked questions in relation to this but in most cases, they were not fully aware of the background to the approach adopted. The findings to this question were broadly along similar lines across both Institutes of Technology and the University, with the requirement to address deficits in post-primary level emerging as a major theme. One respondent, commenting on the rationale for implementation stated:

It was geared towards helping the students to make that transition. So in a way, it wasn't that programme-level changes alone that provided that opportunity. But when the window for change opened up that the opportunity was jumped upon because at that time we were desperately trying to get this new curriculum going and make some sort of a difference. Plus, this offered the possibility that we could target the transition from secondary school to university (interview site 3 – driver of implementation).

The timing of the adoption of transition-related modules was surprisingly similar yet completely independent of each other, with it being introduced between 2010 and 2012 in all three cases. Within the Institute of Technology sector, the National Strategy for Higher Education to 2030 (also known as 'The Hunt Report') was a significant factor.

I suppose the rationale kind of goes back to 2010/2011 and quite a large number of reports that were coming out were talking about the whole transitions from second level to third level and some were preparing students for third level particularly independent learning (interview site 2- driver of implementation).

A meta-theme to emerge from the research was the role of the Strategic Innovation Fund (SIF) in providing funding to support initiatives in this field, in particular, within the Institute of Technology sector. Thus, a participant acknowledged:

Well it goes back to the SIF programme and we won the funding from the strategic innovation fund and the theme was student leadership and there were two strands to that, student learning and curriculum reform so one of the major objectives was to develop a first-year program for the institute and that would have two sides to it, one that would be student led and one that would be teacher led and that's where the 'learning to learn' module emerged from that students need a foundation piece to help that transition from second level into third level (interview site 1 – driver of implementation).

The Strategic Innovation Fund was established according to the Higher Education Authority website

As part of the Irish Government's response to the OECD's Review of Higher Education in Ireland (2004), the Strategic Innovation Fund (SIF) was launched in 2006 to support the enhancement of quality and effectiveness across the higher education sector. Specifically, the SIF was established as a mechanism for institutional restructuring and modernisation; for the enhancement of teaching and learning; for the development of postgraduate education and research; and for the improvement of equity of access into, and progression through, higher education. Inter-institutional collaboration has been a distinctive feature of the SIF, as has the leveraging of existing resources (through the matched-funding provided by participating institutions) to advance strategic national priorities (HEA, 2016).

As outlined above, the SIF projects targeted a range of initiatives across the spectrum of HE. Applications for funding towards initiatives had to be submitted by HEIs as part of a consortium that demonstrated strong collaboration. This approach established many new networks, friendships and collaborations, in particular within the teaching and learning community that endure to this day. The subsequent formation of the National Forum for the Enhancement of Teaching and Learning in Higher Education is an exemplar of such cooperation.

The SIF projects were of particular benefit within the IoT sector where the restrictive level of exchequer funding, especially post the 2008 financial crisis, has been a challenge. The Government in July 2016 published the report of the Expert Group on the Future Funding of Higher Education titled 'Investing in National Ambition: A Strategy for Funding Higher Education' (known as the Cassells Report) that examined options for funding. This report highlights the fact that the level of funding to the Higher Education sector has been reduced significantly following the global financial crash of 2008. Reference is made to: "The State grant has been reduced from €1.4bn in 2007/08 to €923M in 2015", a decrease of €470M or 39% (Expert Group on Future Funding for Higher Education 2016, p.67). SIF enabled many initiatives to be undertaken that otherwise would not have happened. Along with core funding, SIF financial support was significantly reduced in 2008 as a direct result of the collapse in exchequer funding, but many excellent projects were completed or funding had been allocated that enabled such projects to be finished, albeit with reduced budgets. However, very few of these were mainstreamed due to the lack of ongoing financial support. This is a particular issue within the IoT sector where many exemplary projects were undertaken. However, these were unsustainable from an economic perspective, irrespective of their educational value. This could be a dilemma facing other Irish HEIs. The level of funding for HE and the mechanisms to support same are part of the current dialogue on HE, as evidenced by the Cassells Report and the subsequent discussion on the options outlined in the report. Within the IoT sector, this situation has placed severe strains on resources; thus initiatives such as these transition-related module(s) that require small group teaching to be effective came under internal pressure which may lessen their impact. Examples include attempts to increase the class size to reduce the cost of providing teaching resources associated with these module(s), as witnessed by the author in the Institute where he is employed.

The second element of this question is the level of preparedness which the Leaving Certificate programme provides for students who progress to HE. This question was presented to all nine interviewees and they were in agreement that the Leaving Certificate programme provides inadequate preparation for the transition to HE. The main areas of concern were the focus on

rote learning, combined with the lack of independent learning and critical thinking skills; as identified in the following three quotes:

Oh, definitely not and I've said that since I was a student myself, I don't think the Leaving Cert is fit for purpose. When I reflect on my own Leaving Cert experience and the points race I believe that this wasn't fit for purpose, this doesn't prepare for the reality of what third level is all about and the skills needed for employment it was all about the points to get to college. So if I was if I had of been appointed last week as Minister of Education one of my first jobs would have been to completely overhaul the Leaving Cert. I definitely don't think the Leaving Cert is either fit for purpose or as a preparatory course for third level education, one of the reasons I was on the academic council subcommittee in college, developing a learning to learn module. I raised that it needs to be a strong module to counteract that the Leaving Cert (interview site 2 – academic staff member of staff teaching such a transition related module)

I'm seeing 80% of students now coming to my classes who have come from prescribed Leaving Certs who were delivered by their teachers and that's not the children's fault. That's maybe anxious teachers or anxious schools but it's not doing them any good and certainly to me it's underestimating them. I think it's left them with a false idea of their ability in the positive and negative way they come in with a lot of points and they maybe don't have the skill or they're coming in and they may have the skill and they don't even know they've got it because nobody ever asked them to deliver it (interview site 3 p academic staff member teaching transition module).

The Leaving Cert is a test of endurance. And you're being tested for your memory, your memory is being tested, it's rote learning (interview site 2 – academic staff member teaching transition module).

These findings correspond with other evidence provided from the literature review. Both Hyland (2011) and the ERSI research undertaken by Smyth et al. (2011) point to similar issues e.g. "Leaving Cert students do not focus adequately on these goals and they do not achieve the skills required for higher education and for employment during senior cycle". (Hyland, p.9) and "Leaving Certificate tends to narrow the range of student learning experiences and to focus both teachers and students on 'covering the course'" (Smyth et al., p.22).

One outcome to emerge that was not anticipated by this researcher was related comments that Higher Education, in part, maybe contributing to and perhaps prolonging issues associated with the Leaving Certificate as a result semesterisation repeating the ills of the Leaving Certificate. Two interviewees made points in relation this

I think the combination of semesterisation and five credits every twelve weeks totally lends itself to a continuation of the Leaving Cert strategic approach to you know cover your angles

to try and maximise your returns. So I think that's quite difficult to break think. Actually I blame the universities in a way more than I blame the Leaving Cert because I think the move towards semesterisation, short-term outputs that the students have to deliver and then to an extent some of the continuous assessment I think in a funny kind of a way allows students to be very narrow in their focus in order to get particular credits and park that and start something else (interview site 3 – driver of implementation).

These are interesting points which had not been considered by the author and are worthy of further research. The widespread adoption of semesterisation was driven in the main within Irish Higher Education as a result of the adoption of the EU Bologna agreement in 1999 and the subsequent introduction of the National Qualifications Framework (NQF) with the associated implementation of European Credit Transfer System (ECTS).

Modules or subjects of a study programme are based on 5-credit blocks. The norm is 60 ECTS per year of study, with this total consisting of 12 modules of 5 credits each or 6 modules of 10 credits (or some variant of these). The academic year typically consists of two semesters with twelve teaching weeks in each semester. It can be argued with some justification that requiring students coming straight from the second level to undertake six modules in the first semester and a further six in the second semester of HE can lead to short term outcomes and does not contribute to the development of the skills of independent learning or critical thinking. This is but one factor of the multidimensional aspects of the transition. It is certainly worthy of debate and further research beyond the scope of this research project.

4.2.2 Finding 2: Students' Perception of Transition Related Modules

This question sought to determine students' perceptions of the module they had undertaken, their engagement with the module, and the learning activities covered. It further examined the contribution made to their knowledge and development, including the aspects of the module they enjoyed and the areas that could be enhanced. The questionnaire was designed to cover these matters, with students being asked seventeen questions intended to elicit their views on the module-with the final two questions being open ended and requiring a narrative response. The full questionnaire results are included in [Appendix E](#). In terms of general profile information on the participants, there were 325 responses of which 197 (60.6%) were male and 128 (39.4%) were female; with 192 (59.1%) being collected in site 1 and 133 (40.9%) in site 2. Tables 4.1 and 4.2 below provides a breakdown of the profile of the participants, including gender, number of respondents by site, and the age range.

Male	Female	Total	Site 1	Site 2	Total
197	128	325	192	133	325
60.6%	39.4%		59.1%	40.9%	

Table 4.1 – Profile information on respondents in terms of gender and location

Age Range	N	%
16-18	12	3.7%
19-21	203	62.5%
22-25	64	19.7%
26+	46	14.1%

Table 4.2 – Profile information in terms of age range

Question No. 7 of the questionnaire sought views on students' overall experience of the module, which in terms of descriptive statistics is positive with 15.2% (n=49) of respondents rating the module as 'excellent'; 55.3% (n=178) rating the module as 'good', 24.8% (n=80) rating the module as 'fair'; with 4.7% (n=15) deeming the module to be 'poor'. Figure 4.1 below provides a graphical representation of these findings.

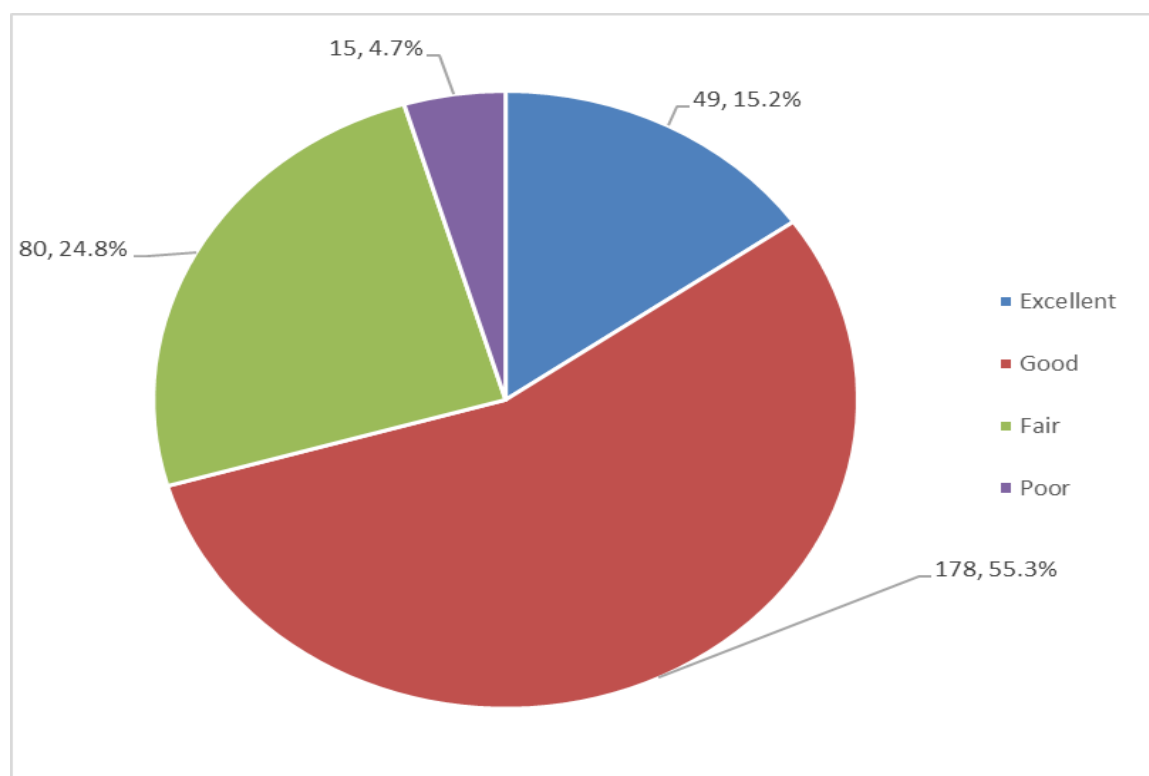


Figure 4.1 – Rating of overall student experience of the module(s)

When you combine the ‘excellent’ and ‘good’ student responses to this question the results are very positive, with 70.5% (n=227) of respondents rating the module as ‘good’ or ‘excellent’.

Since such findings are intended to be extrapolated to provide a better understanding of the entire Irish student population, confidence intervals were calculated to estimate the true percentages regarding the responses to question No. 7. Based on 95% confidence intervals, it is estimated that between 11% and 19% of students would rate their overall experience of the module as ‘excellent’, with around 15% being the most plausible estimate of this (as per Table 4.3 below). Between 50% and 61% on the same basis, would rate their experience as ‘good’ while a small percentage (between 2% and 7%) would rate the module as ‘poor’.

Combining the groups into ‘excellent/good’ and ‘fair/poor’, between 65% and 75% of students would rate their overall experience of the module as ‘good’ or ‘excellent’, with around 70% being the most plausible estimate of this. In term of the grouping of ‘fair/poor’, between 25% and 35% would rate their overall experience in this category, with 30% being the most plausible estimate overall. It may be noted that than 15 respondents (5%) rated the module as ‘poor’ with the remainder (n=80) of the category rating the module as fair.

					Confidence Interval (95%)	
Response	X	N	%	Sample p	Upper	Lower
Excellent	49	322	15.2	0.1522	0.1127	0.1916
Good	178	322	55.3	0.5528	0.4982	0.6074
Fair	80	322	24.8	0.2485	0.2010	0.2959
Poor	15	322	4.7	0.0466	0.0234	0.0697
Excellent/Good	227	322	70.5	0.7050	0.6549	0.7550
Fair/Poor	95	322	29.5	0.2950	0.2450	0.3451

Table 4.3 – Confidence Intervals (95%) of the students’ responses to the question regarding how they would rate their overall experience of the module(s)

Further analysis of the data to identify results worthy of note was undertaken in terms of gender, age range, HEI, and year of study. No significant differences were established for gender, age range or HEI. However, one dimension that is interesting and demonstrates significant differences that emerged relates to year of study; in particular, the rating when first and second-year student feedback were combined into 'excellent/good' and 'fair/poor'. Here there was a substantial difference between the rating from Year 2 respondents, with an expected frequency of 48 versus an observed frequency of 54 using a p value of <0.01 which is statistically significant as per Table 4.4 below.

	Excellent/Good	Fair/Poor	Total
First Year	Obs = 14	Obs = 14	n = 28 (29.5%)
	Exp = 20	Exp = 8	
Second Year	Obs = 54	Obs = 13	n = 67 (70.5%)
	Exp = 48	Exp = 19	
Total	n = 68 (71.6%)	n = 27 (28.4%)	N = 95 (100%)

Table 4.4 Pearson Chi-squared analysis of rating based on first vs second-year students

This result demonstrates that students do not perceive the benefits of this module until later in their academic journey. Perhaps students are not applying the skills and competencies developed during these transitional module(s) until later in their studies. With reference to the literature, and in particular criticisms of the standalone approach as outlined by Wingate (2006), there could be a reinforcement factor here in the context of this finding. The approach taken to delivering these modules in the HEIs, which was evidenced in this research study, is a standalone delivery model. It could be argued that enhanced integration with other modules in first-year studies would facilitate students in applying the skills earlier in their HE studies. One means of such integration might be cross-modular assessment, for example.

Question No. 6 asked students to best describe their attendance levels at lectures. As shown in Figure 4.2 below, student perceptions of their attendance was positive; 59% stating their attendance was above 76% of timetabled lectures, and a combined score of above 51% illustrates that just under 90% of students (n=292) had this level of attendance.

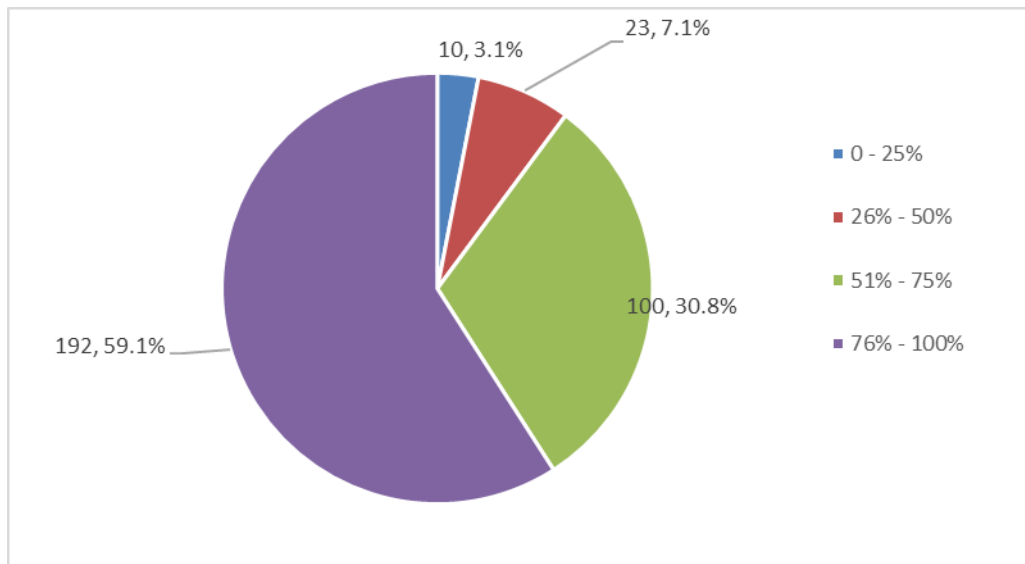


Figure 4.2 – Profile of the level of student attendance at lectures for the module(s)

Question No. 8 consisted of two sections, with part (a) asking students how much time they spend engaged in academic activities within in a typical seven-day week. One to five hours was the most common response, with 31.0% of students stating they engaged in such an amount of academic activity per week. The two most popular answers were 1 to 5 and 6 to 11 hours, giving a total of just under 60% (59.8%). It is somewhat concerning that 5 students reported no involvement in academic activities each week, representing 1.5% of the responses. Figure 4.3 below provides the details.

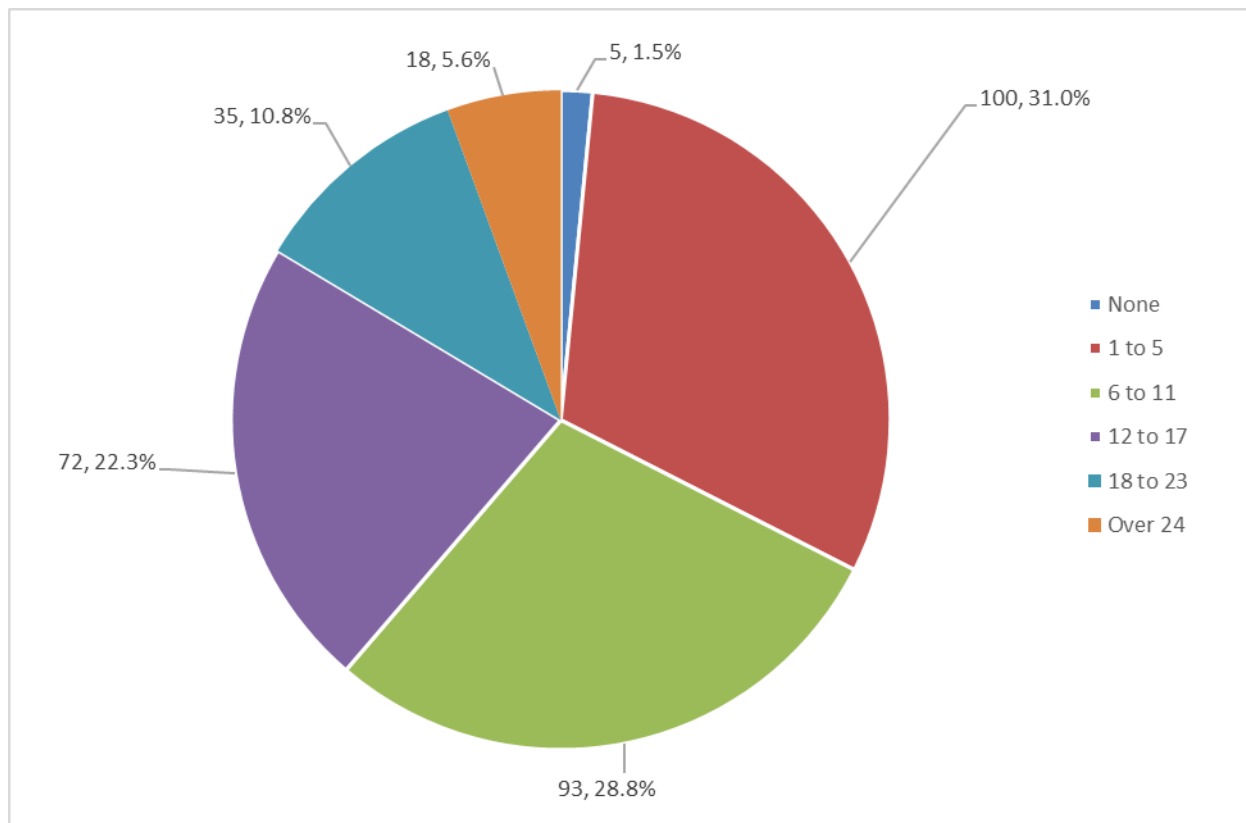


Figure 4.3 – Quantity of hours per week which third-level students devote to academic activities

Question 8 part (b) asked students how this result compared with the amount of time they spent studying for the Leaving Certificate in the final year of post-primary education. As Figure 4.4 shows, the highest response was 'about the same' at 32.0% (n=104). What would be of concern is the fact that 38.2% (n=124) stated that they spent 'less' or a 'lot less' time studying in third level than they had for the Leaving Certificate. Students generally develop good study habits when preparing for the Leaving Certificate examination and this question was intended to determine if they carry those study habits forward into Higher Education. Smyth et al 2011, (p. 98) reported that students "are spending four or more hours a night on homework or study" and that "overall, higher performing groups of students spend more time on homework and study". Combining the results into the 'same or more' when compared to 'less or a lot less' provides a clearer indication.

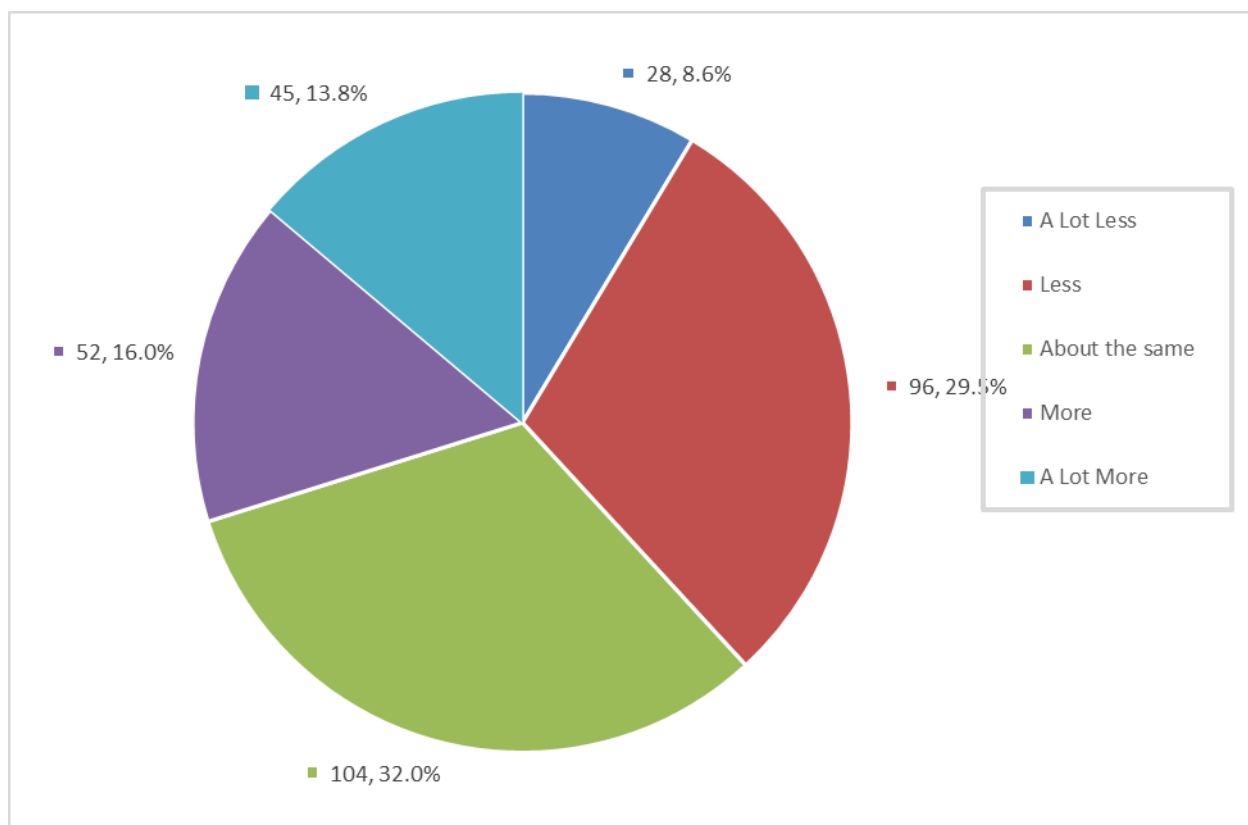


Figure 4.4 – Comparison to amount of time spent studying for the Leaving Certificate examination

When one groups the results for 'A lot more' with 'More' and 'About the same' and compares this to the 'A Lot Less' and 'Less' combined, a clearer indication of student effort at third level as compared to the Leaving Certificate effort emerges. As outlined in Figure 4.5 below, the number of respondents reporting the same or higher in terms of study time is positive with a result of 61.8% (n=201). What would be of concern is that 38.2% (n=124) stated that they did 'less' or 'a lot less' studying in third level than in preparation for the Leaving Certificate examination. Does this indicate that students consider Higher Education to be less demanding than the Leaving Certificate or are there other reasons for the relatively high percentage of students who are doing less work in HE than for the Leaving Certificate? In terms of performing well in HE, it can be argued based on anecdotal evidence and on the author's experience, that the amount of time dedicated to academic activities is a significant determining factor in the grades achieved. Certainly, the field of learning analytics is an emerging area in terms of linking engagement to academic performance and offers much potential for future research, as does linking responses to the questions with regard to time spent engaged in academic activities (reference a similar question on the Irish Survey of Student Engagement) and subsequent academic performance.

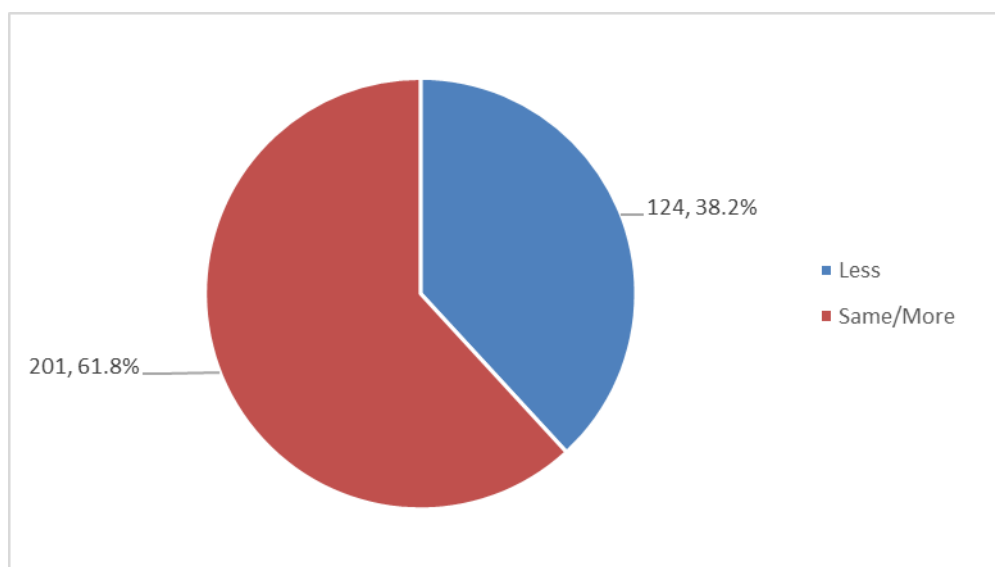


Figure 4.5 – Combined results for 'A lot More/More/About the Same' compared to 'A lot Less/Less'.

Are HEIs doing enough to reinforce the need for students to engage in academic activities especially when presenting the first year induction process to them? Views on this are strongly linked to the expectations of HEIs and the extent to which they are interested in

students' academic activities. It can be cogently argued since the introduction of the recurrent grant funding model (RGAM) (in part linked to the new performance-based model) where financial support is linked to student numbers, that retention of students is key to the financial viability of HEIs; hence they need to encourage students to engage to the fullest possible extent in order to minimise attrition rates. Such institutions will in future receive funding only to the extent that students are retained. Even in year 1 HEIs receive only half funding when a student withdraws after 1 November during the academic year. This situation impacts especially within the IoT sector in Ireland where there is a significant gap in the funding for students versus the allocation to the university sector, with many IoTs becoming stretched financially. Strategic priorities should include maximum levels of student engagement and it is readily accepted that modules such as those under consideration in this study are not the only means of achieving this outcome. However, they can form a key part of HEIs strategies in this area.

Question 11 asked students about the extent to which the module emphasised elements of the syllabus content that might be expected in such a study component. Figure 4.6 below provides descriptive statistics on the results, with 'Plagiarism' emerging as the highest ranked in the 'Very Much' rating at 56.6% (n=184). Combining the results for 'Very Much' and 'Quite a Bit' provides more valuable information.

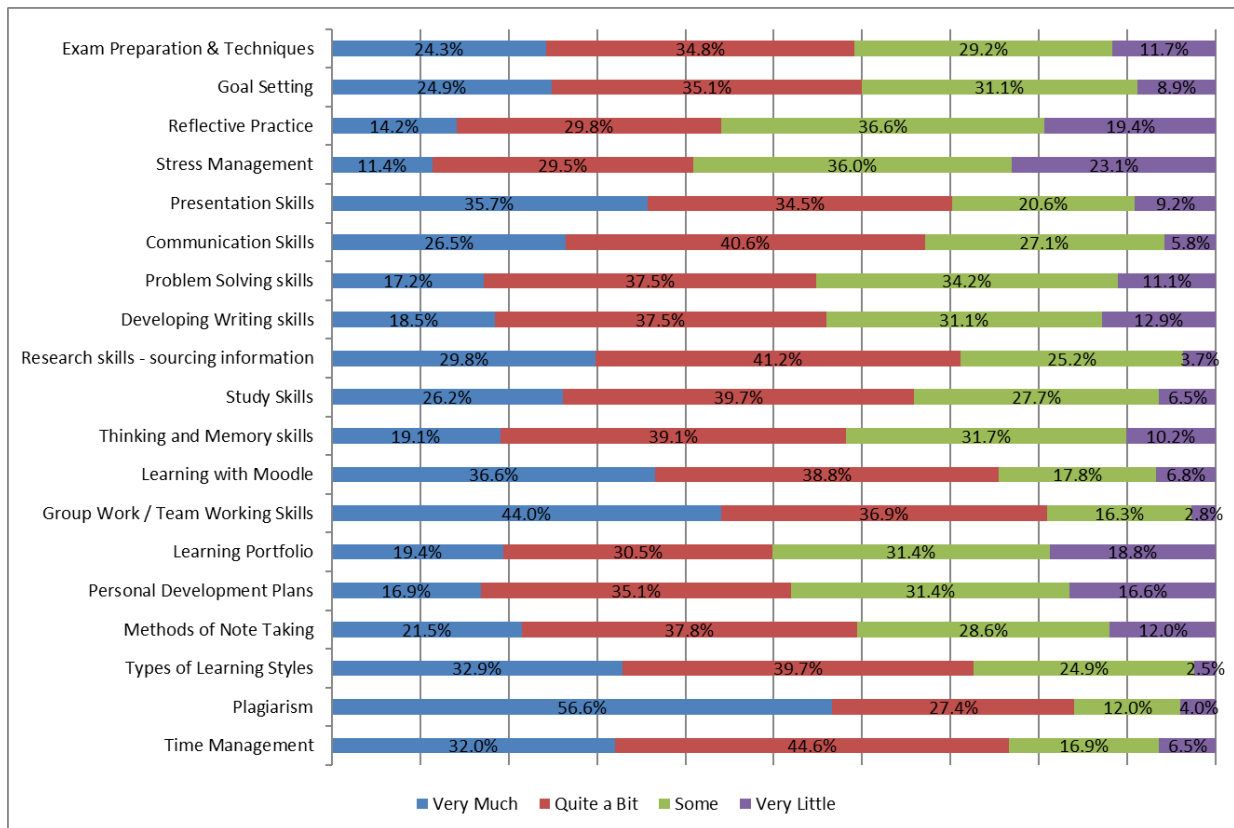


Figure 4.6 – Areas of the transition-related module(s) that were emphasised by students

When these groupings are analysed there are a number of areas which show significant results. Using a Pearson's chi-squared 'goodness-to-fit' test, these results were calculated for each area and the following were significant in order of the chi-squared list:

- Plagiarism
- Group Work
- Time Management
- Learning with Moodle
- Types of Learning Style
- Research Skills
- Presentation Skills
- Communication Skills
- Study Skills
- Goal Setting.

Table 4.5 below provides the details of the responses to question 11 in terms of 'Very Much' and 'Quite a Bit' to show the chi-squared and 95% confidence interval

Measure	'Very Much-Quite a Bit'	N	Chi-squared	Sample p of 'Very Much-Quite a Bit'	Confidence Interval (95%)	
					Upper	Lower
Time Management	249	325	92.089***	0.7662	0.7199	0.8124
Plagiarism	273	325	150.280***	0.8400	0.7999	0.8801
Types of Learning Styles	236	325	66.489***	0.7262	0.6774	0.7749
Note Taking	193	325	11.449**	0.5936	0.5402	0.6475
Personal Development Plans	169	325	0.520	0.5200	0.4654	0.5746
Learning Portfolio	162	325	0.003	0.4985	0.4438	0.5531
Group Work/Team Working Skills	263	325	124.311***	0.8092	0.7663	0.8522
Learning with Moodle	245	325	83.769***	0.7539	0.7068	0.8009
Thinking and Memory Skills	189	325	8.643**	0.5815	0.5276	0.6355
Study Skills	214	325	32.643***	0.6585	0.6066	0.7103
Research Skills-sourcing information	231	325	57.751***	0.7108	0.6612	0.7603
Developing Writing Skills	182	325	4.680*	0.5600	0.5057	0.6143
Problem Solving	178	325	2.957	0.5477	0.4933	0.6021
Communication Skills	218	325	37.911***	0.6708	0.6194	0.7221
Presentation Skills	228	325	52.803***	0.7015	0.6515	0.7516
Stress Management	133	325	10.711**	0.4092	0.3555	0.4630
Reflective Practice	143	325	4.680*	0.4400	0.3857	0.4943
Goal Setting	195	325	13.000***	0.6000	0.5465	0.6535
Exam Preparation and Techniques	192	325	10.711**	0.5908	0.5370	0.6445

Table 4.5 – Elements of the module(s) emphasised, based on combined 'Very Much' and 'Quite a Bit' based on student responses.

(The data was analysed by means of a Pearson's chi-squared 'goodness-to-fit' test using SPSS. This test determines if the proportion of students who feel that the module helps them 'Very Much' or 'Quite a Bit' is significantly different from an assumed 50/50 proportion. If the student proportion significantly deviates from 50%, it is denoted as a significant difference (p-values denoted on chi-squared values using *). All chi-squared values without a * are not significantly different from an assumed 50/50 proportion. Of course this test could also identify proportions that are significantly less than 50%, but in this case, all significant differences were greater than 50%. *p < 0.05, **p < 0.01, ***p < 0.001)

Further analysis to determine if there were any significant differences between aspects of the profile information provided by respondents produced only one area of difference i.e. that of 'Types of Learning Styles' based on gender. As outlined in Table 4.6 below, a significant

number of females in the 'Very Much' and 'Quite a Bit' category reported that the module emphasised 'Types of Learning Styles'.

	Very Much/Quite a Bit	Some- Very Little	Total
Male	Obs = 133 Exp = 143.1	Obs = 64 Exp = 53.9	n = 197 (60.6%)
Female	Obs = 103 Exp = 92.9	Obs = 25 Exp = 35.1	n = 128 (39.4%)
Total	n = 236 (72.6%)	n = 89 (27.4%)	N = 325 (100%)

Table 4.6 – Summary of profile analysis where there was a significant difference in the proportions of males and females who indicated that the module(s) emphasised 'Types of Learning Styles' Chi-squared = 6.549, $p < 0.05$

From the list of possible syllabus content areas, module developers whether starting with a blank sheet of paper or modifying existing content, should take cognisance of the areas with significant results in terms of the chi-squared result, in particular the highest scoring areas of 'Plagiarism', 'Group Work/Team Working Skills' and 'Time Management'. Equally, consideration could be given to excluding areas with low scores such as personal development plans and learning portfolios. These findings are reinforced by the findings to the qualitative question no. 16 related to the best aspects of the module which are discussed later in the chapter.

Question 13 sought student feedback on the extent to which their experience of the module contributed to their knowledge, skills and personal development across the different areas. Figure 4.7 provides descriptive statistics on the results, with 'Making a presentation' being rated highest under 'Very much' at 38.2% (n=124). Next, is 'Working with others' at 36.6 % (n= 119). The combination of 'Very Much' and 'Quite a Bit' is over 70% for both 'Making a presentation' 74.5% (n=242) and 'Working with others' is 70.8% (n=230).

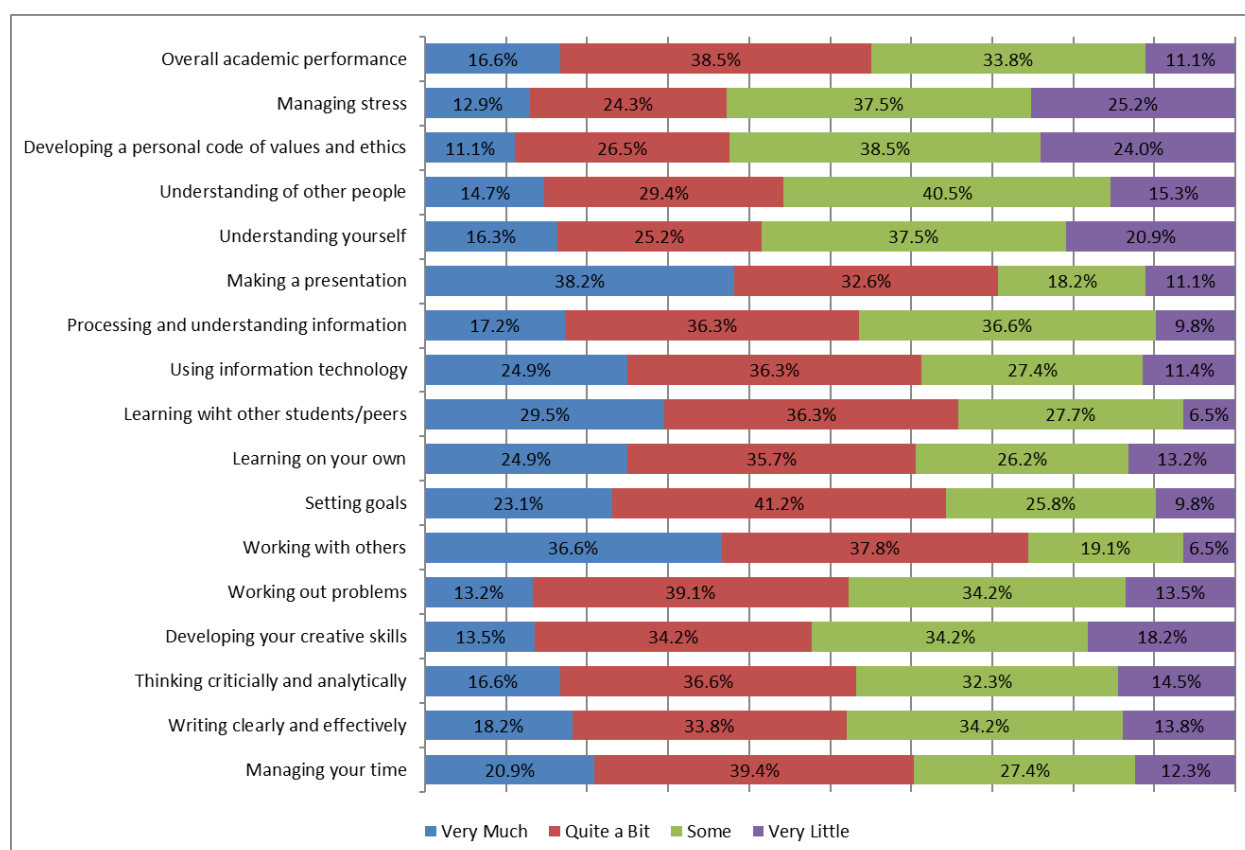


Figure 4.7 – Contribution of the transition-related module(s) to students' knowledge, skills and personal development.

As with the statistics for question no. 11, these results were extrapolated to gain a better understanding of the population. Pearson's chi-squared and 95% confidence intervals were calculated to identify any significant results in relation to those elements which the feedback contained by way of response to this question. The results for 'Very Much' and 'Quite a Bit' were added together for this analysis and the following areas were shown to be very significant as outlined in Table 4.7 below.

- Managing your time
- Working with others

- Setting goals
- Learning on your own
- Learning with others
- Making a presentation
- Developing a personal code of values and ethics
- Managing stress

Two further areas ‘Understanding Yourself’ and ‘Understanding Others’ were significant but by a lesser factor than those mentioned above. The other areas were not significant.

Measure	Very Much-Quite a Bit	N	Chi-squared	Sample p of Very Much-Quite a Bit	Confidence Interval (95%)	
					Upper	Lower
Managing your time	196	325	13.812***	0.6031	0.5496	0.6566
Writing clearly and effectively	169	325	0.520	0.5200	0.4654	0.5746
Thinking critical and analytically	173	325	1.357	0.5323	0.4778	0.5868
Developing your creative skills	155	325	0.692	0.4769	0.4223	0.5315
Working out problems	170	325	0.692	0.5231	0.4685	0.5777
Working with others	242	325	77.788***	0.7446	0.6970	0.7923
Setting goals	209	325	26.612***	0.6431	0.5907	0.6954
Learning on your own	197	325	14.649***	0.6062	0.5528	0.6596
Learning with other students/peers	214	325	32.643***	0.6585	0.6066	0.7103
Using information technology	199	325	16.397***	0.6123	0.5591	0.6656
Processing/Understanding Information	174	325	1.628	0.5354	0.4809	0.5899
Making a presentation	230	325	56.077***	0.7077	0.6580	0.7574
Understanding yourself	135	325	9.308**	0.4154	0.3615	0.4692
Understanding others	143	325	4.680*	0.4400	0.3857	0.4943
Developing a personal code of values and ethics	122	325	20.188***	0.3754	0.3225	0.4283
Managing stress	121	325	21.197***	0.3723	0.3195	0.4251
Overall academic performance	179	325	3.351	0.5508	0.4964	0.6051

Table 4.7 – Further analysis of the contribution which the module(s) made to students’ knowledge, skills and personal development.

As with the result for question 11 module developers should note the significant results, in particular, 'Working with Others' and 'Making a Presentation'. There are strong linkages between the results for questions 11 and 13 especially with regard to team working aspects and presentations. Again, these results are reinforced by replies to question no. 16 regarding the best aspects of the module. Areas such as 'Using information technology' afford opportunities for integration with other modules as many first year programmes of study include a dedicated computer applications or similar subject. In the context of these module(s), it can be argued that information literacy should be a particular focus.

In Question 14 respondents were asked 'Reflecting on your studies overall to what extent do you believe that this module has assisted with the following academic activities? Figure 4.8 provides descriptive statistics on the replies of this question. As when analysing the responses to other questions, combining the results for the categories 'Very Much' and 'Quite a Bit' provides the most valuable information.

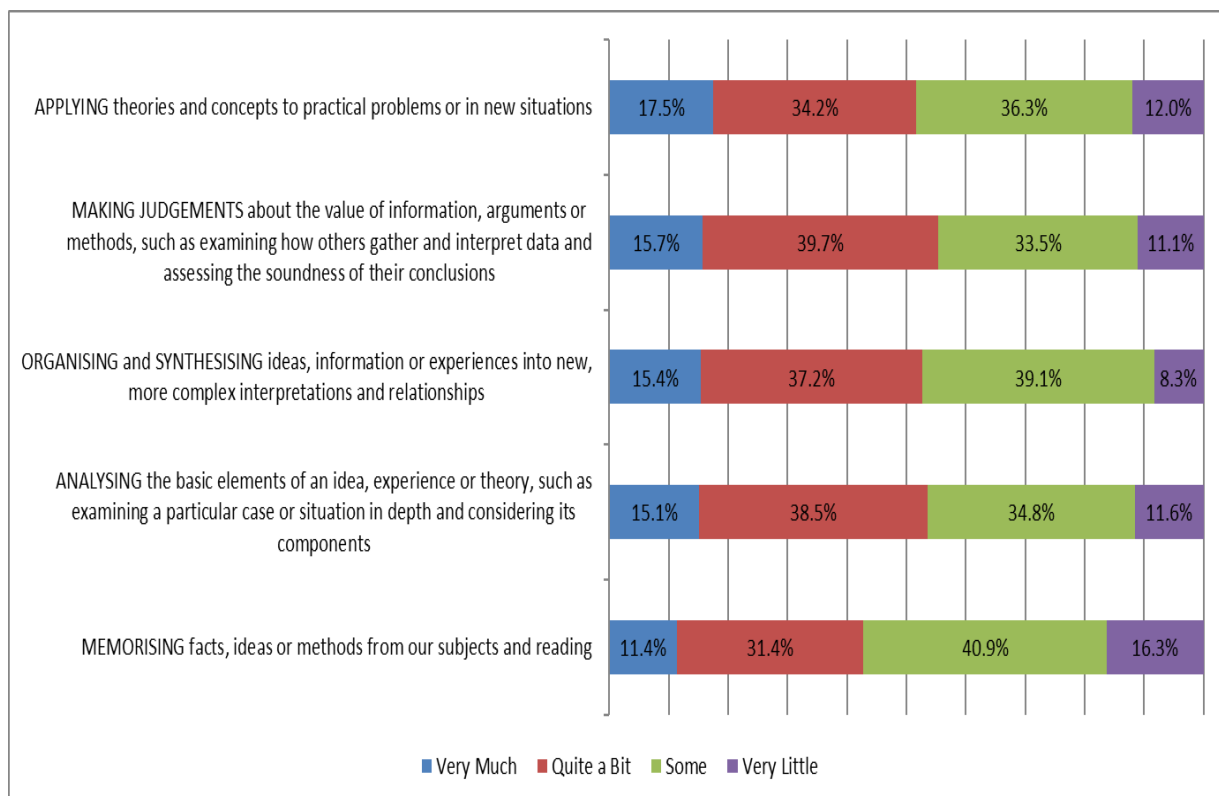


Figure 4.8 – The extent to which the module(s) has assisted students with the above academic activities

As for the above answers, the combination of results was analysed using Pearson's chi-square and 95% confidence intervals.

Measure	'Very Much-Quite a Bit'	N	Chi-squared	Sample p of Very Much-Quite a Bit	Confidence Interval (95%)	
					Upper	Lower
MEMORISING facts, ideas or methods from our subjects and reading	139	325	6.797**	0.4277	0.3736	0.4818
ANALYSING the basic elements of an idea, experience or theory, such as examining a particular case or situation in depth and considering its components	174	325	1.628	0.5354	0.4809	0.5899
ORGANISING and SYNTHESISING ideas, information or experiences into new, more complex interpretations and relationships	171	325	0.889	0.5262	0.4716	0.5807
MAKING JUDGEMENTS about the value of information, arguments or methods, such as examining how others gather and interpret data and assessing the soundness of their conclusions	180	325	3.769	0.5539	0.4995	0.6082
APPLYING theories and concepts to practical problems or in new situations	168	325	0.372	0.5169	0.4623	0.5715

**p < 0.01

Table 4.8 – Further analysis of the extent to which the module(s) assisted with the above academic activities

Memorising facts, ideas or methods from subjects and reading emerged as the most significant result from this question. The results for the other academic activities were not significant based on the chi-squared method. When including this question, which is taken from the course experience questionnaire (CEQ), the author was seeking to identify if the module was assisting in making a transition from the rote learning model prevalent in post-primary education towards higher-order thinking which would be expected on the journey through HE. Thus, it could be suggested that these modules are having little impact and that students are merely carrying the techniques and study habits from post-primary education to

HE. On this basis, advocates of such transition-related modules may regard the feedback in response to this question was disappointing. However, it can be argued that this module(s) forms only part of a broader transition process that takes time to develop and many of the academic activities listed above are not utilised before the latter stages of an honours degree programme or even until postgraduate level. The question asked 'reflecting on your studies overall to what extent do you believe that the 'Learning to Learn' module at third level has assisted with the following academic activities? The responses were based on four ratings i.e. 'Very Much', 'Quite a Bit', 'Some' and 'Very Little'. If one takes the view that this module merely aims to help with transition and does not purport to transform students but merely to assist with the transformation process and that other study modules need to reinforce the transition, then the results for this question are extremely positive. For all academic activities when one combines 'Some', 'Quite a Bit' and 'Very Much' the results are over 80%; with 'organising and synthesising ideas, information or experiences into new more complex interpretations and relationships' being the highest at 92%.

Question No. 15 invited responses on a series of statements developed by Dweck to assess individuals' views on intelligence and whether it is malleable. The question related directly to research question 3 which sought students' views on self-theories within an academic context. The outcome to this question is dealt with later in the chapter.

Question No. 16 asked – What are the BEST ASPECTS of the module i.e. elements you enjoyed /found interesting / useful in subsequent modules?

A total of 280 out of the 325 students replied, with responses ranging from a few words to a fuller answer. Both the responses to this question and to question no. 17 on aspects for enhancement provided a rich data set that was analysed using systematic qualitative analysis. With regard to the 'Best Aspects', ten meta-themes emerged in the analysis of the responses. These themes are summarised in Table 4.9 below and provide extracts of the findings in relation to the most common themes. The most cited theme was 'Presentations' (n=70) and the confidence that students gained from undertaking same. 'Group/Team Work' (n=63) and 'Study Skills' (n=55) related activities such as time management and goal setting were next. Other themes were 'Transition Related' (n=38) such as settling into HE, making friends, getting to know classmates, the social aspects of HE and the role of the academic staff member delivering the module. The final two main themes were 'Assignments' (n=38) i.e. assisting with the completion of assignments and 'Referencing/Plagiarism' (n=32) i.e. the responses note the benefits of being able to reference and an understanding of plagiarism and how to avoid it.

Theme	Findings – student quotations
'Transition Related (settling into HE, making friends, getting to know classmates, friendly lecturer)' (n=51)	<p>"Allowing student to settle into college life, the new challenges that appear. Useful in many ways I found at the end of the module it helped focus myself to study and work harder"</p> <p>"Eases you into third level".</p> <p>"As a mature student it was a considerable help returning to studying".</p> <p>"Easy Module, good class to open your eyes to college life".</p> <p>"Helping with transition from secondary to third level".</p> <p>"Having a lecturer you can go to for help adjusting into college life. Practising skills you will need in college and life working in groups".</p> <p>"Getting to know classmates as class groups were small. It was easier than other modules and therefore felt like a break".</p> <p>"The teacher we have for this module made it interesting. He made it seem less of a class and more of a class that you wanted to go to with your friend".</p> <p>"The aspects that prepared us for second year, some lecturers expect your work to be presented in a certain way. Without this module a person would progress to second year and make lots of mistakes".</p>
'Presentations (confident gained from them)' (n=70)	<p>"Confidence from doing presentations".</p> <p>"Confidence you get from presentations".</p> <p>"Development of skills and abilities to do a presentation".</p>

	<p>"Learning how to make and do a presentation to the class was very helpful and I may need this skill in the future".</p> <p>"Getting to experience doing a presentation with this group of people for the first time".</p> <p>"Group presentations as it involves everyone and builds confidence".</p> <p>"Presentations -PowerPoints in front of class gave me more confidence".</p> <p>"Getting to know other students in your class Confidence you get from doing presentations".</p>
'Group/Team Work' (n=63)	<p>"Group projects enable me to get to know more people in class. It was also interesting to do a group assessment because I am a bit of a control freak and didn't think I would be comfortable with the task - but I was".</p> <p>"I found it extremely beneficial working as part of a team to present a project, it prepared us for the projects which presented themselves to us in the future. Helped us prepare for the difficult CA's by teaching us techniques for time management and study techniques".</p> <p>"It was practical and helped my experience when it came to working in a team".</p> <p>"Learning to work in teams makes you a better problem-solving person".</p> <p>"The best thing about this module was a lot of team work and projects which made it easier to connect with other people"</p> <p>"Working in groups expanded my knowledge and communication skills".</p> <p>"Working in groups, meeting new people".</p>
'Study Skills (such as Time Management, Goal Setting, Communication Skills, Critical Thinking)' (n=55)	<p>"I found time management very useful. I found the learning very useful".</p> <p>"Critical thinking, different ways to look at things. Found this the most interesting, puts everything into different perspectives, look, listen but most of all take your time to make a judgement".</p> <p>"Learned to analyse all aspects of life and learned to look at a situation from all parties' perspective".</p> <p>"Study skills and methods on how to study. Time management area was good as it made you log your week and keeping to your study plan like exercise that you may have set yourself."</p> <p>"Study Techniques and prep, interaction/class discussion relevant assignments".</p> <p>"The organisation aspect of the module, from gathering information to putting the results in written form was a great help".</p> <p>"Time management skills, studying skills".</p>
Other themes to emerge included	
<p>'Referencing/Plagiarism' (n=32) the responses mentioned the benefits of being able to reference correctly and the knowledge gained regarding what is plagiarism and how to avoid it.</p>	

'Assignments' (n=38) the response mentioned the knowledge gained in assisting them with completing assignments.

There were a small number of negative comments (n=4)

"Nothing, it was pointless".

"Found the module of no relevance at all".

"I did not personally like the module".

"I did not enjoy the module. I was marked very harshly in the end."

Table 4.9 - Extracts of student comments on the best aspects of the module(s)

These findings align with the research undertaken by the National Forum for the Enhancement of Teaching and Learning in Higher Education (NFETL), where the main discovery was that:

Time management was identified by the students as the most significant element of the transition from second level to higher education. This was followed by a change in the requirements for written assessments, critical thinking and conducting independent research. Other areas identified as challenging included increased personal responsibility, financial and social challenges (Denny 2015, p.5).

The same research further recommended, "more introductory classes on the academic skills required for higher education such as referencing, essay writing, note taking etc." (Denny, 2015, p.6). The research, in addition, highlighted 'time management', 'organisational skills' and 'confidence' as skills and competencies needed to succeed in Higher Education. Under suggestions what was or would be helpful in assisting with the transition "Intro to note taking, Time management, Study skills, Essays, Grading etc." (Denny, 2015, p. 37) was most cited by students.

The negative comments in the current research study in relation to this module, although small in number (n=4), should not be ignored. They point to a lack of involvement by those particular students. Possible factors such as the level of engagement by the academic staff member teaching the module or even the name of the module may contribute to a lack of commitment on the part of the student.

Question No. 17 read as follows – ‘Any ASPECTS of the module you think could be improved /amended to enhance the module’?

As with question 16, the purpose was to elicit students’ suggestions by way of an open question on aspects of the module which could be enhanced. Although respondents were requested to reply to all questions, this was the single question that was left unanswered by many students. The total of 176 responses received for this question compared unfavourably with 280 answers to question 16. As with the previous question, the systematic qualitative analysis identified a number of meta-themes which are outlined below in Table 4.10 including extracts of the findings. The most cited theme is ‘Not Relevant, Waste of Time, Boring’ (n=30) with responses stating that some students found the module to be monotonous. The following themes had the same response rate of n=28; these being ‘More emphasis on aspects of the module’ and ‘Integration/Coordination with other modules’. The final themes were ‘More Group Work/Presentations’ (n=23) and ‘Assignments’ (n=21) and, in particular, the assessment methods employed to assess this module.

Theme	Findings – student quotations
‘Integration/Coordination with other modules, more practical focus’ (n=28)	<p>“Needs to be made more relevant to the course, seemed very general across all courses. Often felt like it was a waste of time as there was more important subjects”.</p> <p>“More emphasis on the importance of this module, as it was my 1st year it went over my head”.</p> <p>“More relevance try to link with other modules”.</p> <p>“Needs to be more practical”.</p> <p>“Could help students with more of an introduction to their course i.e. what it’s all about and where it can lead you to”.</p> <p>“More practical work, instead of listening to lecturer read from his notes. Also, I think it should have been encouraged for the students to try and find techniques they felt most difficult & could be improved”.</p>
‘More emphasis on aspects of the module’ (n=28)	<p>“More referencing, more on sourcing references This is the groundwork on all future assignment/projects etc.”.</p> <p>“There should be more concentration on how to answer exam questions and the structure of it. Improving exam vocabulary. No need for study skills everybody has their own. Concentrate on things that help people at exam and CA times”.</p> <p>“Using IT skills more, more referencing skills”.</p> <p>“More focus on research/study resources”.</p> <p>“More time spent focusing on time management and organisational skills”.</p> <p>“More about personal change to college and adapting to new work”</p>

<p>‘Not Relevant, Waste of Time, Boring’ (n=30)</p>	<p>“Make it more exciting somehow, it was very boring”.</p> <p>“Not really didn't agree with the module, felt coming out of the Leaving Cert that I was able to study, felt the timeframe for this module could have been used better”.</p> <p>“Why do we even do it”.</p> <p>“As a mature student, I did not find the module much use as it seemed to be aimed at school leavers”.</p> <p>“For the mature student L to L is not too much of an advantage as a lot of the time management skills and teamwork skills have already been developed”.</p> <p>“I found it quite boring at times and couldn't see the benefits until 2nd year”.</p> <p>“It was slightly boring and very demanding when the accounting subjects required more work at the same time”.</p> <p>“My experience with L2L wasn't good. Didn't get much knowledge from it as it is mostly common sense”.</p> <p>“more interesting and fun. It was very boring class but you did learn”.</p> <p>“A lot of the content and workload I felt was irrelevant and irksome. The exercises and assignments could be co-ordinated in a more light-hearted and stress freeway, as general the module felt like a waste of time”.</p>
<p>Other themes to emerge included</p> <p>‘More Group Work/Presentations’ (n=23) the responses on this theme were that more group work/presentations should be undertaken.</p> <p>‘Assignments’ (n=21) and in particular the structure of assignments associated with this module were the main points raised.</p> <p>As was the case with question no. 16, there were a small number of positive comments (n=5).</p> <p>“Not just do it for the one year and do it every year and if you participate in class and do assignments marks are there to be taken”.</p> <p>“No, I honestly believe it's a brilliant module. I'm so glad I had the opportunity to do it. I am a lot better off in college for having completed it”.</p> <p>“As I mentioned previously our lecturer had the talk but he could also "walk the walk". It was a great foundation for not alone going back to college but also for back to work and indeed life in general”.</p>	

Table 4.10 – Extracts of students comments on aspects of the module(s) for amendment to enhance its effectiveness

Again, these comments present interesting findings, and those referring to integration with other modules, in particular, align with the literature in this area. Many authors contend that such integration within a programme of study is key. Wingate 2006, (p.457) argues that

The widespread approach to enhancing student learning through separate study skills courses is ineffective, and the term 'study skills' itself has misleading implications, which are counterproductive to learning. The main argument is that learning how to study effectively at university cannot be separated from subject content and the process of learning.

This contention is supported Drummond et al. (1998, p.20) who found that students do not recognise a generic course as relevant to their subjects. Gamache (2002, p.277) emphasises that teaching study skills without linking them to subject content inevitably encourages the undesirable epistemological belief that knowledge is an 'external, objective body of facts' which can be acquired with certain tricks and techniques. Knight and Yorke suggest that the

Many institutions have packaged up key skills (not necessarily those identified by Dearing) into separate modules, sometimes trivialising them and dis-integrating them from the curriculum. Put colourfully, in such circumstances key skills – and, by extension, employability – are being ghettoised" (Knight & Yorke 2002, p. 263).

The author aligns with the literature findings that integration and contextualised learning should be key features of transition-related modules. It is his opinion that such integration would serve to negate the comments from the theme 'not relevant/waste of time/boring'. Such a conclusion is supported by Kemp & Seagraves (1995, p.316) who stated that

Research in cognitive development and related cognitive skills (analysis, synthesis, critical thinking, problem-solving) suggests that these are discipline related...We live in contexts, we learn in contexts, we work in contexts and no two contexts are exactly the same. Our ability to contextualise skills is as important as the skills themselves.

As highlighted in Table 4.4 above there is a significant difference in the overall positive ranking of the module as between first and second-year students, which reinforces the lack of integration. It can be contended that students do not apply the skills and competencies from this type of module until later in their studies. The challenge for HEIs delivering such module(s) on a standalone basis is to ensure appropriate, essential linkage with other modules across the study programme.

The findings on 'not relevant/waste of time/boring' are of importance, as are the small number of similar comments in relation to the best aspects. These need to be appraised and

further research is required in this area. However, as with the theme of question no. 16, both student and academic staff member engagement with the module is crucial; an assertion probably best summed up by one of the few positive comments in reply to this question, as now repeated here:

“As I mentioned previously our lecturer had the talk but he could also "walk the walk". It was a great foundation for not alone going back to college but also for back to work and indeed life in general.”

4.2.3 Finding 3: What are students’ views on self-theories within an academic context?

This research question sought student feedback on self-theories in order to discover their outlook in terms of a fixed or growth mindset based, as outlined earlier, on a research instrument devised by Dweck (1999). This question has seven statements related to students’ views on intelligence, first one being ‘you have a certain amount of intelligence, and you can’t really do much to change it,’ with a six point Likert scale from ‘strongly agree’ to ‘strongly disagree’. Statements 1, 2 and 4 are Fixed mindset in outlook and statements 3, 5, 6 and 8 are slanted towards a Growth mindset. Table 4.11 below provides the data gathered from these questions, in terms of actual responses.

Place indicate the extent to which you agree or disagree with each of the following statements							
Answer Options	Strongly Agree	Agree	Mostly Agree	Mostly Disagree	Disagree	Strongly Disagree	Response Count
You have a certain amount of intelligence, and you can't really do much to change it	11	48	66	64	85	51	325
Your intelligence is something about you that you can't change very much	9	57	55	60	89	53	323
No matter who you are, you can significantly change your intelligence	92	97	76	40	14	5	324
To be honest, you can't really change how intelligent you are	13	32	43	80	99	58	325
You can always substantially change how intelligent you are	56	116	81	49	17	6	325
No matter how much intelligence you have, you can always change	75	128	74	32	10	5	324
You can change even your basic intelligence level considerably	76	121	75	33	16	2	323

Table 4.11 – Students’ views on Fixed versus Growth mindset

The raw scores were calculated into a weighted score which translated into a classification, as outlined in the data analysis section, with specific details of the conversion set out in [Appendix E](#). The four classifications are: 'Strong growth mindset', 'Growth with some fixed' ideas, 'Fixed with some growth' and 'Strong fixed mindset'. 'Strong growth mindset' was the most common response at 45.8% (n=149); next was 'Growth with some fixed ideas' at 37.2% (n=121), followed by 'Fixed with some growth' at 14.8% (n=48), and finally 'Strong fixed mindset' which scored the lowest at 2.2% (n=7). Figure 4.9 below provides a graphical representation of the findings.

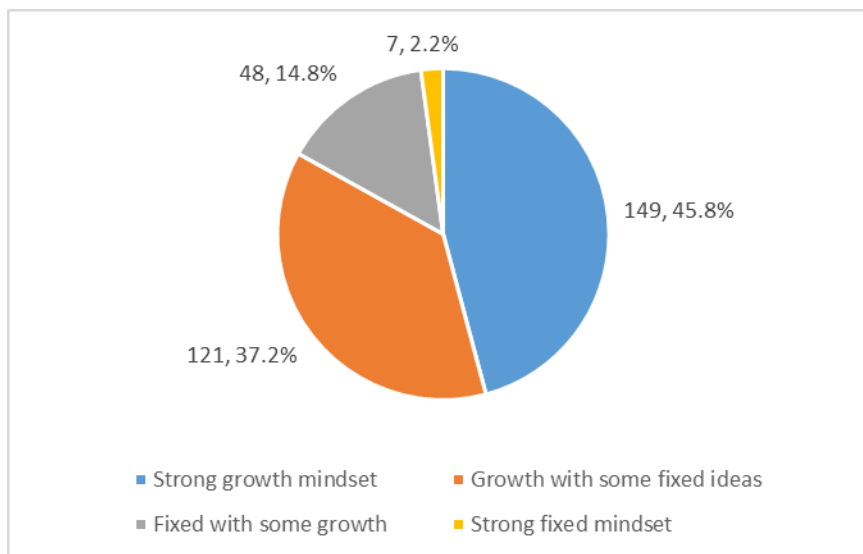


Figure 4.9 – Results of Self-theories scoring based on student feedback

When one combines the 'Strong growth mindset' with the 'Growth with some fixed ideas' the combined score is 83.1% (n=270) and the combined score for 'fixed with some growth' with the 'strong fixed mindset' is 16.9% (n=55). The below Figure 4.10 provides a graphical presentation of the scores.

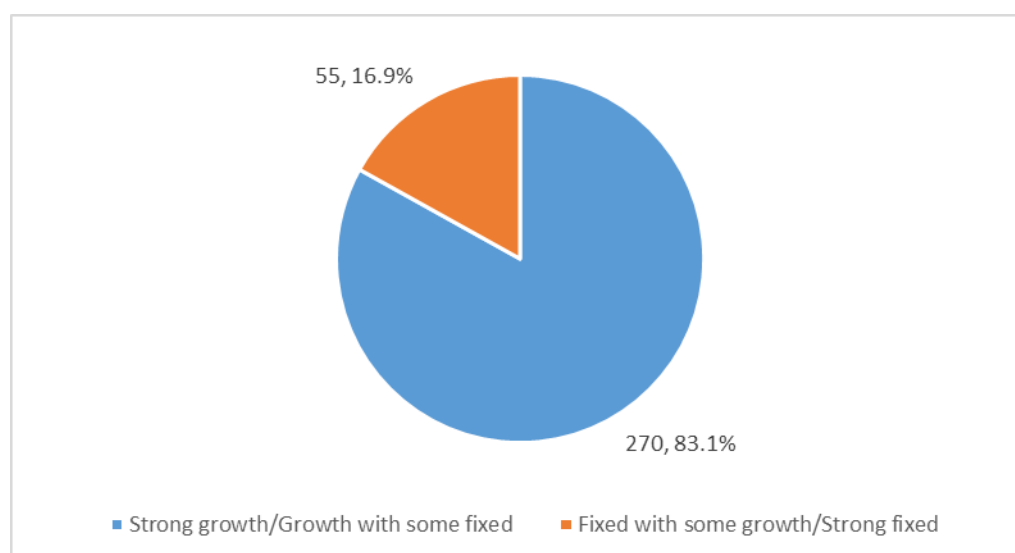


Figure 4.10 – Self-theories combined scores based on student feedback

These results are very positive and better than those of Yorke & Knight (2004), which tested students on a similar mindset quiz (albeit with a much larger sample size). They report that responses to “the items suggest that something between 25 and 30% of students tend towards a fixed view of intelligence and 70 to 75% towards a malleable view” (p. 29).

The current research project results were analysed by gender and by HEI, with no significant distinctions being found. When analysed by age of the student differences emerged as between age classifications with a much higher rating on the 'Strong growth mindset' score coming from older students. The 'Strong growth mindset' score for the 22-25 age group was 58% (n=37) and for the 26+ grouping was 50%(n=23) whereas the 16-18 age group the score is 33% (n=3), albeit with a much smaller number of respondents in this category. Table 4.12 below provide the details. The full listing of the analysis of the scores for this question can be found in [Appendix F](#).

	Age							
	16-18	%	19-21	%	22-25	%	26+	%
Strong growth mindset	4	33.3%	85	41.9%	37	57.8%	23	50.0%
Growth with some fixed ideas	6	50.0%	83	40.9%	19	29.7%	13	28.3%
Fixed with some growth	1	8.3%	31	15.3%	8	12.5%	8	17.4%
Strong fixed mindset	1	8.3%	4	2.0%	0	0.0%	2	4.3%
Total	12		203		64		46	

Table 4.12 – Mindset scoring by age category of student

These scores demonstrate a malleable mindset amongst the students which is welcomed on the basis that they are open to the concept of a growth mindset. The results demonstrate that in three of the four age categories students are demonstrating malleable mindset scores in excess of 80% (with the final one at 78%). As shown in Figure 4.10 above, 83% (n=270) demonstrate a malleable mindset, with only 55 (17%) of the 325 respondents indicating a fixed mindset. The author is positively surprised with these results as his expectation had been that while there would be a lean towards a malleable mindset it would not be as high as 83%. Based on this outcome it can be argued that students should be taught the basics of self-theories as part of the introductory modules under discussion. As [Appendix A](#) illustrates, none of the modules included in this research currently covers self-theories. The author suggests that the translated-related modules would be enhanced by the inclusion in the indicative content of self-theories, as well as an explanation of how students might use the relevant competencies to enhance outcomes on their educational pathways. The basic tenet of self-theories is that learners can develop, grow and enhance their academic outcomes via the belief that intelligence is malleable. Persistence, effort, hard work and not giving up when faced with difficult challenges can be developed and cultivated through learning.

4.2.4 Finding 4: How do academic staff delivering the developmental module(s) view their role

This question focuses on the role of the academic staff member delivering the module, an aspect that receives scant coverage in the literature. Within the IoT sector, academic staff have contracted weekly contact (teaching) of between 18 and 20 hours which is significantly higher than in the University sector. Due to various factors, not all staff can be timetabled for their contracted hours and in such cases, those responsible for timetabling (usually Heads of Department) are under pressure to achieve full utilisation of resources. This has been particularly so since the reduction in exchequer funding and can lead to a situation where academics are assigned to this module just to fulfil the contracted hours requirement, with little or no regard to the skills, abilities or competencies required to teach such a component effectively. The author has witnessed this within his own institution in the early years of adoption. This situation has changed in the past year or so, but the author suggests it is something HEIs delivering such a module must take into account. Below are the views of two of the interviewees on the matter.

I think it is very much influenced by who teaches it there's this notion everybody can teach L2L. Everybody probably can teach it but not everybody can teach it well and that for me is a big problem and so I would very strongly feel that the experience of students is determined by the ability and the interest of the person who's teaching it. So, therefore, I think when you evaluate it a bad evaluation mightn't mean it's not a good subject it might mean that we're getting some of the other things around it wrong you know (Extract Interview G – module teacher).

If you have somebody who's looking to fill their hours or a Head of Department says this person is two hours short let's throw them into learning to learn and they're somebody who in many cases have no background in education or teaching or even the interest you're not going to have the buy-in from the students and this is precisely what I have, again not mentioning any names but I can think of two or three lecturers who were simply thrown into learning to learn without wanting to, without having an interest in it, or a background in it and you'll find in those modules, in those faculties it's not performing as well as it is in the faculties that there's severe buy -n or where the lecturers are really engaged in learning to learn. So the staff member is absolutely key (Extract Interview C – module teacher).

One of the challenges which HEIs face is the fact that academic staff in Higher Education are the only educators in Ireland that do not require a formal teaching qualification. Both primary and post-primary education teachers are required by legislation to have formal qualifications

and also be registered with the Teaching Council of Ireland which verifies the qualifications. While having a teaching qualification does not automatically lead to becoming a good teacher, it does ensure that teachers regularly undertake professional development activities. Continuous professional development, with particular reference to teaching and learning, should be a requirement within the HE sector. The National Forum for the Enhancement of Teaching and Learning is in part seeking to address this matter through the creation of a professional development framework. A draft framework was published in July 2016 aimed at all staff who teach in HE. However, adoption even on a voluntary basis, will be slow especially within the IoT sector with its strong trade union representation. One interesting angle on this issue came from interviewee D within the University sector who stated that

Most of the academics who are on the permanent staff who have research obligations and commitments find that very difficult, to do that kind teaching, six times delivering the same thing, so the particular people who deliver that module are belonging to a particular category... that they are a little unique that would be my view (Extract Interview D – driver of implementation).

The author would maintain that the role of the academic staff member teaching this type of module is crucial and as quoted above “anybody can teach such a module but not everybody can teach it well”. The success or otherwise of such a module is dependent on the relevant academic staff member having the appropriate profile and expertise. Based on the experience in the author’s own institution, time should be dedicated to providing some training for staff who will be delivering such a module. Below are the views of two interviewees as to the qualities of a suitable teacher in this context:

It should typically be an applied type teacher, somebody who’s very experienced in problem based learning or enquiry based learningAnd they really understand the learner and they understand how learners tick and they understand how to engage them It shouldn’t be about an instructional type session do you know what I mean it should be about active participation so, bringing it back down a level to the learners (Extract interview F – driver of implementation).

I think the particular people who have delivered that module... need to be very student centred, student focused (Extract Interview D – driver of implementation).

With regard to the teaching and learning approach, the predominant response from the interviews was the emphasis placed on engagement with students and the importance of an

active, 'hands on', problem or case-based approach to teaching that would engage students. Class size is a key influencer in terms of teaching and learning, with small student groups being the approach adopted by all HEIs in this research. Below is an extract from interviewees A and E who offer their verdict on the appropriate teaching style:

Keep them engaged, keep them engaged. I've talked to other students from other streams about how it went in learning to learn because I'm teaching other streams and I'd say you should have listened and they go oh don't talk about it, so boring..we hated it. You've got to keep the students engaged and with a course like this there's so much on it and so much scope on it if you can't keep students engaged, that says something about you and not them. You can do almost anything you want on this course (Extract Interview A – module teacher).

For me it probably would be, talk less, listen more. Base it on reality and not academics. Listen to them. If you could get them to talk. The peer strength is massive, peer pressure is huge. (Extract Interview E – module teacher).

In terms of advice to any HEI proposing to develop/adopt such a transition-related module, the extract below might well be considered as excellent advice.

I would say don't reinvent the wheel. I know we looked and again I know I keep coming back to personal development planning because that was where the thing started for me, if you like and we looked at the UK which had a much stronger tradition of having personal development in undergraduate programmes and it was a revelation just how much good material there was out there and how much it captured many of the things we were all saying based on intuition rather than any scientific knowledge. So I think a key thing is to have somebody who really believes in it leading it up, somebody who will be allowed to stick with it so that they can learn from the experience of implementing it. I think it is very useful that those people would be allowed to engage with people in the UK who have tried some of these things or in other institutions that have introduced them but at the same time leave enough flexibility to suit the particular context (Extract interview D – driver of implementation).

In terms of the 'nuts and bolts' of the module, the recommendation based on the author's experience and the interviews in this research is that semester 1 of year 1 is most appropriate location for such a module. A five-credit module should lead to least resistance as this will result in existing modules (where applicable) being impacted to a lesser extent. Other academic staff whose modules are reduced or removed to accommodate such a transition-related module(s) are the most likely source of resistance. Three hours of teaching per week including one hour in an IT lab (where students do not have access to their own computers) to cover information literacy is a recommended approach. Small class sizes to encourage engagement and discussion among the students is another desirable feature. This will lead to additional resource requirements; however, these modules are not suitable for large group

teaching. In terms of assessment of the module, all the interviews cite that the assessment strategies for these modules incorporate 100% continuous assessment. The range of assessment methods includes projects, presentations, reflections, portfolios and engagement levels. The author does not propose to make any suggestions in this area but rather to give each HEI the freedom to adopt the most appropriate assessment strategy which provides a good fit with the existing assessment methodology. The one caveat, however, is that summative written traditional examinations are not suitable for such a module. The advice and guidance from the learning and teaching unit, if there is one is invaluable, plus discussion with other HEIs which have implemented such a module is of paramount importance in this context. Finally, integration with other modules yields substantial benefits to students as they are afforded the opportunity to deploy the acquired skills and competencies across the entire curriculum. Such integration, based on the modules covered in this research project, has yet to be realised.

4.3 Summary

This chapter outlined the findings of the research project both in terms of quantitative data and qualitative data. The findings were presented in relation to the research questions, and while 70% of students rated the module as 'good or excellent' this raises a number of interesting points concerning these modules and the transition process more generally. From a student perspective, the confidence gained from undertaking this type of module is a key factor. Such confidence is directly related to having to deliver presentations either on a group or individual basis. Group work contributes to the socialisation aspect of transition, settling in and getting to know other students. Students generally have a growth mindset which is a welcome and reassuring finding. In terms of enhancement, integration with other modules is the missing element at present and this conclusion is reinforced by the discovery of a much higher rating for the module from students in second year. The suitability of the academic staff member delivering the module, together with its title, can be regarded as having a role in influencing student perceptions of the module. One unexpected finding was that semesterisation in third-level education may be responsible for reinforcing some of the substantive issues associated with the Leaving Certificate programme. The next chapter will discuss the overall findings, bringing them to a conclusion and also making recommendations

incorporating the limitations of this research as well as offering proposals for further research studies.

Chapter 5 – Conclusions and Recommendations

5.1 Introduction

This research study which sought to investigate the rationale for and to carry out an evaluation of introductory module(s) that support students with the transition to Higher Education in Ireland was conducted through the research lens of mixed methods research, as outlined in chapter 3. The research examines introductory modules in the Business Schools in three Higher Education Institutions in this country. This chapter, based on the findings, considers broader issues and presents conclusions in the context of the findings and research literature reviewed by the author. The limitations of the research, which relate mainly to difficulties encountered during the project, together with suggestions for future research studies, are also set out. Finally, recommendations for HEIs which have introduced or may be considering the introduction of transition-related module(s), are outlined.

5.2 Conclusions

5.2.1 Rationale for the introduction of Transition Related Module(s) and views on the Leaving Certificate Programme as a preparatory mechanism for Higher Education

As evidenced in the literature, transition-related module(s) are at an embryonic phase within Irish Higher Education. Internationally such modules, termed ‘study skills’ in much of the literature, have experienced a much longer gestation. Within the UK context, for example’ the Dearing Report entitled ‘Higher Education in the Learning Society’ was published 1997 and became a key driver towards the adoption of study skills modules. This report’s recommendations encourages the development of....”key skills such as communication, numeracy, the use of information technology and learning how to learn; cognitive skills, such as an understanding of methodologies or ability in critical analysis (p.74)” as essential features of this type of ‘bridging’ component. In Australian Higher Education, study skills have been part of landscape since the late 1970s: “the Australian research literature, political rhetoric and public commentary argue that employers require graduates to be confident communicators, to work effectively in teams, to be critical thinkers and problem solvers, and to be able to initiate and respond to change” (Badcock, et al. 2010, p.441). Yet, within an Irish

context, such modules are a relatively new development, with the majority being introduced post-2010. The findings from the current research study show that from 2010 onwards all of the HEIs surveyed had introduced such modules. The timing was similar in the HEI where the author is employed. There is general agreement in the literature regarding the benefits for students. However, there is a debate as to the most appropriate format for delivering such modules. The obvious question is why were Irish HEIs much later than their international counterparts in adopting such a transitory approach, given there was and is a significant amount of literature in support of such an initiative?

There are several possible answers to this question. Contributing factors may include a certain lack of awareness of recent literature in terms of the transition process involved in progressing to Higher Education. Additionally, resistance to change among academic staff could be a stumbling block, particularly within the Institute of Technology sector where the trade union influence is traditionally strong and exerts a degree of informal peer pressure. Academic staff are often protective of their (perceived) modules and teaching time (in terms of ownership); finding space within a study programme to accommodate such modules can lead to territorial conflicts. The demands of professional organisations such as the Accountancy Bodies within Business Schools wishing to maximise student exemptions from professional examinations post-graduation can also mitigate to some extent against the provision of additional teaching time for the type of module under discussion. A lack of commitment at institutional level and/or insufficient resources, can be another inhibiting factor. The reduction in exchequer funding post-2008 may have also contributed to the non-expansion of this innovative approach.

The findings of this research project show that the desire to enhance the transition to HE was the main factor in the adoption of such a module, combined with SIF funding for initiatives within the teaching and learning field and the implementation of The Hunt Report recommendations. The Hunt Report – ‘National Strategy for Higher Education to 2030’ which was published in 2011 but widely leaked in advance certainly has been a significant influencer on adoption within the IoT sector, in particular the recommendation that “higher education institutions should prepare first-year students better for their learning experience, so they can engage with it more successfully” (p.18). The recommendations are being reinforced

through the annual HEA compact that links institutional performance to an element of available exchequer funding.

The findings illustrate that there is unanimous agreement among the academic staff interviewed as part of this research project that the Leaving Certificate programme provides inadequate preparation for students who progress to Higher Education. These findings concur with the literature that highlights the focus on rote learning and teaching to the examination, as referenced by the Hyland Report and ERSI research. The Leaving Certificate programme makes for ineffective preparation for Higher Education as it induces a form of reproductive learning which is contrary to what is required in many areas of HE. The linkage of the Leaving Certificate examination result to the mechanism for entry to Higher Education contributes in part to this issue.

The pilot scheme introduced by Trinity College Dublin that affords consideration of broader attributes beyond CAO points is worthy of serious consideration. Here, the basis for determining students' entry to Higher Education is not solely their performance in one series of examinations in June (after 5 or 6 years of post-primary education). Two areas of concern in terms of broader and innovative entry mechanisms immediately spring to mind. Firstly, the inclusion of a personal statement, or similar, could possibly lead to the development of a cottage industry for the preparation for same. There is evidence in support of this view by referencing the example of the HPAT test for entry to medical school. This is also mentioned by Hyland (2011, p.4) and could be regarded as advantaging those who can afford to pay for such a service. Secondly, the independence of the reviewers of the applications might be challenged, given the history or lack thereof in Ireland with regard to ethical, 'arm's length' decision making. The author contends that both concerns are valid. It is clear from the emotive language used in the letters published in the Irish newspapers that the introduction of an innovative entry mechanism to Higher Education generates strong views on both sides of the debate. There is no doubt that under the current system examination results are transparent, despite its reported deficits, and can claim a high level of public trust and confidence.

However, many of the problems identified in this research study are not unique to Irish post-primary education, as reflected in the widespread focus on 'study skills' modules internationally. Reform of the Leaving Certificate process, whenever implemented, is likely to be tedious and marred by disagreements between the various stakeholders. There have been calls for the adjustment of the entry mechanism to Higher Education as far part back as 1963 and in again in 1967, 1970, 1986 and 2011. These were combined in a report by the HEA entitled 'Supporting a Better Transition from Second Level to Higher Education-Key Directions and Next Steps' produced in conjunction with the main stakeholders in the debate the SEC, NCCA, IUA, IoTI, and DES. The foreword by the then Minister for Education and Skills, Ruairi Quinn, TD states:

Ireland needs students and graduates who are critical thinkers and problem solvers with an intrinsic enjoyment of acquiring and using knowledge. Reducing over-reliance on rote learning and "teaching to the test" which inhibit that kind of broad learning experience at second level is a key objective of this work. Part of achieving that will lie in addressing problematic predictability in the Leaving Certificate examination and the existence of an unnecessarily granulated grading system (HEA 2013, p.3).

These directions, one could argue, constitute window dressing with no attempt to tackle the required challenge which is a reform of the Leaving Certificate programme and the associated assessment methodology. The recently introduced reform of the Junior Certificate which witnessed strong trade union resistance is welcomed in the context of addressing the issues highlighted with the LC, in particular, the new 'Key Skills of the Junior Cycle'. However, as outlined in the literature, previous efforts to reform the Leaving Certificate have not served to achieve its aims nor those of the NCCA 'Key Skills Framework'. The author argues that courageous leadership is required to initiate discussion with regard to the level of change required for any vision to become reality. At present, such leadership would appear to be absent.

An unexpected finding emanating from this research study (already referenced) was that HEIs unwittingly may be exacerbating the issues associated with the learning approach adopted by students for the Leaving Certificate through their implementation of semesterisation with a 'bite size' approach to learning i.e. skill, test, skill, test. In some cases, first-year students are undertaking 12 modules, six in semester one and the remainder in semester two. If one expands this model to include assessment, it is reasonable to assume that each module will

include continuous assessment with two to three units to this plus a terminal examination at the end of the semester. The total number of assessments over the duration of the standard twenty-four weeks of teaching during the academic year could be as many as forty-eight, an average of 2 per week. It can be argued that this constitutes over-assessment, with students having scant time to engage in higher-order activities. In the author's opinion, this system certainly contributes to a reproductive learning approach which is at variance with the goals of independent and self-directed learning. This is a topic worthy of further exploration.

One-point of note and about which there is no discussion within the literature related to the actual name of the transition-related module. This may have an impact on the level of student engagement. Within the Institute of Technology sector, the original name adopted by many HEI's was 'Learning to Learn' as referenced from literature and, in particular, the QQI award descriptors. As demonstrated in Table 2.5, the title of the module(s) varies. However, students' perceptions of the module entitled 'Learning to Learn' may be negative as evidenced by comments made on aspects of the module that could be enhanced such as "Changing the name to anything except Learning to Learn, maybe College survival skills". HEIs developing or already teaching such a module should bear this reaction in mind.

5.2.2 Students' Perception of Transition Related Modules

As already highlighted, students' overall perceptions of the transition-related module(s) are positive, with 70% rating it as 'Excellent/Good'. This demonstrates that they are benefiting from undertaking this study component. The aspects of the module content which students found emphasised the most based on a chi-squared 'goodness-to-fit' test were 'understanding plagiarism', 'group work' and 'time management', with 'presentations skills' and 'communication skills' also being significant. In terms of the student feedback on the extent to which their experience of the module contributed to their knowledge, skills and personal development 'managing your time', 'working with others', 'setting goals', 'learning with others', 'making a presentation' and 'developing a personal code of values and ethics' were most significant when the 'very much' and 'quite a bit' ratings were merged. These

findings are in line with the literature, particularly the research undertaken by Denny (2015) on behalf of the National Forum for the Enhancement of Teaching and Learning.

There is a significant gap in the findings between the overall experience of the module for first-year versus second-year. There is a substantial difference between the ratings, with second year students rating their experience far more positively. This finding suggests that many students are not identifying with the benefits until later in their studies. It can also be maintained that this difference in feedback between first and second-year students is the result of a certain lack of application of the skills and competencies learned in this module until later in the study cycle.

In terms of the academic activities that students consider the module to have assisted with, 'analysing the basic elements of an idea, experience or theory, such as examining a particular case or situation in depth and considering its components' was positive in that 53% rated this factor as 'Very Much/Quite a Bit'. For the criterion 'synthesising and organising ideas, information or experiences into new, more complex interpretations and relationships' the rating was the same at 53%. On 'making judgements about the value of information, arguments or methods, such as examining how others gather and interpret data and assessing the soundness of their conclusions' the 'Very Much/Quite a Bit' rating reached 55%. These ratings reinforce the students' positive attitudes towards the module.

When analysing the qualitative responses to the questions inquiring about the aspects of the module that students' enjoyed, five themes emerged from this rich source of data with 'presentations' (in particular group presentations) and the confidence gained from undertaking them emerging as the most significantly positive aspect. Next was 'group/team work', then study skills (such as time management, goal setting, communication skills and critical thinking), another theme was 'referencing/plagiarism'. The final theme was 'transition' related with students outlining how the module assisted with the process of settling into Higher Education via making friends and getting to know your classmates in the small group setting. One student asserted the following "it allows students to settle into college life, the new challenges that appear, useful in many ways I found at the end of the module it helped focus myself to study and work harder". The quantitative and qualitative

data generally aligned in terms of the most beneficial aspects of the module, in particular, on the benefits of group work assisting with the socialisation aspect of transition.

The areas for enhancement identified three themes with more 'integration/co-ordination with other modules' and 'more emphasis on certain aspects of the module' being the highest rated. The final theme was 'not relevant, waste of time, boring'. The lack of integration/coordination with other modules highlights the standalone nature of the delivery model being employed in the HEIs as evidence from the current research. This method of module delivery is at variance with literature recommendations, in particular, those of Wingate (2006) who argues that "the widespread approach to enhancing student learning through separate study skills course is ineffective (p.457)". Both this research study and the literature highlight the fact that the embedded/integrated approach is more student centred. However, being a pragmatist, a situation where elements of this type of introductory module are taught within other modules could invariably lead to some or all topics not being covered during the academic year as the demands of the mainstream syllabus and the interests of the academic staff member take precedence. The challenge for HEIs delivering standalone modules is to enhance the integration with other modules. This can be achieved via joint assessments and strong consultation/collaboration between academic staff members teaching first-year modules, particularly during semester one. This collaboration should encourage all academic staff to integrate the skills and competencies learned in these introductory transition-focused modules to ensure seamless reinforcement across other subjects in an integrated manner.

The full benefit of these modules cannot be realised without the students having to reinforce and implement the skills and competencies on a regular basis. There is no point in learning how to reference; if the student does not apply the skills again until they arrive at a final-year project. The adoption of an integrative programme assessment strategy which requires students to employ their skills across a range of assessment methods would provide the opportunity to reinforce and further develop the skills and competencies from the transition related module(s) into subsequent modules during the programme of study.

5.2.3 What are students' views on self-theories within an academic context?

The findings in relation to students' views on growth versus fixed mindset swing strongly on the growth end of the spectrum. The combined 'Strong growth/Growth with some fixed ideas' score from the responses was 83%. This supports the view that students are open and willing to learn and that they are potentially receptive to the concepts of self-theories and the belief that you can develop to become a better learner. The results are positive and in line with replies to similar questions which were included in the 2016 US NSSE, although a direct comparison is not possible. They indicate that the Irish students who completed these questionnaires are more disposed towards a growth mindset than their US counterparts. The results from the questionnaire by age category represent the only classification with any real differences. The findings also demonstrate that mature students have the highest score for a 'Strong growth mindset'. The literature, and in particular the work of Dweck and her colleagues, demonstrates the positive aspects of a malleable mindset. At present, none of the transition-related module(s) syllabi cover self-theories. The author contends that self-theories should be included in the syllabus content, with a view to enhancing students' views of their inherent potential for learning, as well as providing them with relevant competencies to enhance outcomes on their educational journey.

5.2.4 How do academic staff delivering the developmental module(s) view their role?

The final element of this research project investigated the role of the individual academic staff member delivering this type of introductory module and explored the learning and teaching approach in use and aimed to provide recommendations for any HEI considering the introduction of such a module. The qualitative data from the interviews with academic staff and open-ended responses from students to the questionnaire point to the vital role of the teacher of such a module. There is evidence, in particular at the introductory stage, of staff being asked to teach it just to complete their contracted of hours. Such staff can be said to have little knowledge of the skill sets required to deliver this type of module effectively. The experience of students is undoubtedly influenced by the teacher and their responses to the

survey questionnaire mirror this view. One respondent stated “As I mentioned previously mentioned our lecturer had the talk but he could also ‘walk the walk’. It was a great foundation for not alone going back to college but also for back to work and indeed life in general”. This was reinforced in one of the interviews who stated “anybody can teach this module but not everybody can teach it well”.

The teaching and learning approach is vital as this is a module that requires the active participation of students; the traditional ‘chalk and talk’ approach is not appropriate. The responses from academic staff delivering the module confirm that engagement with students is a key factor. Equally, students need to fully interact with the module to derive the fullest benefits. All of the HEIs in this research have adopted a small group approach, with circa 30 students per group. The modules are all delivered in year one, semester one, with three hours of teaching per week. Some incorporate one hour per week in a computer laboratory to cover information literacy, an approach which the author would strongly approve. The missing link at present, as identified from both the student responses and the literature is the lack of integration with other modules. The standalone approach to delivery can be justified only on a pragmatic basis. However, it is clear that students are not applying the skills and competencies learnt in these modules until later in their studies. Integration can be achieved via a number of strategies, the most obvious one being integrated assessments, as proposed above.

5.3 Recommendations

The recommendations from this research project are framed in the findings, the literature, and the personal experience of the author. They are aimed towards HEIs that currently deliver a transition-related module(s) or are considering the adoption of same.

Recommendation No.1 – HEIs need to take ownership of the issues associated with the Leaving Certificate Programme

This research demonstrates the benefits to students of transition related modules and they should, the author suggests form a vital of element of a broader post-primary to Higher Education transition strategy adopted by any HEI. The author contends that transition related modules are one means of HEIs taking ownership of the issues surrounding the approach to teaching, learning and assessment of the Leaving Certificate programme and scaffolding the transition to HE. It has the added benefit of assisting students with the socialisation aspects of transition via a small group teaching approach.

Recommendation No.2 – There is no requirement to ‘reinvent the wheel’

For any HEI considering the adoption of this module (as was suggested by one of the interviewees), there is no requirement to ‘reinvent the wheel’. There is a body of literature available for reference. Modules such as these have been implemented in many HEIs internationally as well at home. There is a significant wealth of knowledge and experience available which can be mined to provide the most appropriate solution for any given HEI. One of the key decisions requires a choice between an embedded approach and a stand-alone / ‘bolt-on’ approach to module delivery. The literature strongly suggests that an embedded and contextualised approach is the most effective. However, as the findings have shown all the HEIs included in this research are adopting a standalone approach, and there are many valid pragmatic reasons for same but this approach requires integration with other modules. The manner in which integration is achieved is key. It is suggested this is achieved via cross modular assessment and close co-operation between the academic staff delivering these and the other year one modules on a study programme. The findings of this research provide guidance on module content areas and the aspects of the module learners found most beneficial such as presentations and the confidence gained from them, group/team work,

study skills, referencing/plagiarism and assisting them with settling into HE with making friends and getting to know their classmates in a small group setting.

Recommendation No. 3 – HEIs should host workshops in advance of implementation

It is recommended that any HEI considering adoption of same would host a workshop (or a series of workshops) for both the drivers of the implementation and relevant academic staff who will be teaching the module. This workshop would cover the literature in this area plus suggestions on the delivery model covering teaching, learning and assessment approach incorporating models of good practice feedback to students on assessment performance. It is suggested that the workshop be delivered by a subject expert in this field who is based at an institution that delivers such modules. This would facilitate discussion of the decisions to be made in the context of the approach most suited to the profile of the particular HEI. To assist with these discussions, the author has developed a series of questions that should be considered when developing a transition related module. These questions are included in [Appendix G](#).

Recommendation No. 4 – Transition related modules should be subject to continuous review

Continuous review and enhancement should form part of all quality assurance mechanisms associated with transition-related module(s). Academic staff should be encouraged to be innovative in their approach to teaching, learning and assessment. These approaches should be reviewed on an annual basis. Certain activities/initiatives will work while others will need to be revised. Over a period, a knowledge base will develop as to what works well and why and this should lead to an even more effective module and an enhanced approach to delivery and assessment.

Recommendation No. 5 – Use an appropriate module title

It is recommended that a standard module title should be agreed that reflects importance of the module and this title be deployed across the HEI. Module titles with Learning to Learn or similar should not be used. The module aims and objectives should become uniform to the fullest possible extent. However, each Faculty, School or Department should have the freedom to determine the module learning outcomes, indicative content and, most importantly, the assessment strategy best suited to their domain to ensure that the learning is contextualised to the field of study.

Recommendation No. 6 – Careful consideration should be given to whom delivers the module

The final recommendation is that careful consideration must be given to the academic staff member(s) who deliver the module. The academic staff member has a significant influence on the student experience of the module and it is vital that the student centre approach that encourages engagement and discussion. To quote one of the interviewee responses “anybody can teach such a module but not everybody can teach it well”. Allocating this module to a member of academic staff just to fulfil their contracted hours’ requirement must be avoided at all costs. One aspect in relation to academic staff that has been beneficial in authors’ host institute is the creation of a community of practice within each Faculty or School (or even Institute level) to facilitate the sharing of experiences of module delivery, assessment and feedback. This provides valuable inputs to the quality assurance mechanisms.

5.3 Potential Biases and Limitations of the Study

This research study may have been influenced by the researcher’s personal biases and experience having been a driver of the implementation of a similar module in the institution where he is employed. The researcher is a strong advocate of the requirement to support students with the transition to HE, in particular within the IoT sector where they may have a less favourable impression of their academic abilities based on their prior experience of education. All efforts were taken by the researcher to ensure that any potential bias was eliminated.

The research project initially planned to gather the views of students in both the University and Institute of Technology sectors. The author was keen to explore whether students from each sector had different views of the introductory modules under review, whether they felt that they benefited to the same extent and, in particular, what were their views in relation to growth versus fixed mindsets? However, due to a number of factors, data collection with students within the University sector was not possible to arrange. As only one University Business School offer such a module an alternative could not be sourced. Thus, a planned element of the research had to be excluded. While the author was disappointed with this setback the research project had to continue. Not being able to secure access to the relevant students removed the element of comparison between the views of students in the University

sector and those within the Institute of Technology sector. In particular, feedback on the value of a transition-related module(s) from a context where students are perceived as having a higher academic profile became a limiting factor. In addition, it would have been very interesting to determine if there were any significant differences between the respective student views on self-theories. In terms of the research as it progressed the other main limitation was the number of responses to the questionnaire. The data collection with students was limited to two Institutes of Technology. The actual process proved to be a significant challenge in that the author operated on the basis of an in-class distribution of questionnaires. The student attendance was less satisfactory than anticipated and multiple visits were required to achieve an appropriate level of response. The adoption of a snowball approach to sampling was also needed. The total number of responses was below the level the author would have expected in an ideal scenario.

The study may well have been enhanced by undertaking some research in one of the Irish HEIs that does not have a dedicated module in order to determine the factors and rationale for such an approach. This would have provided an alternative angle to this study. However, time constraints and deadline limits were the main barriers to engaging in such an extended approach. A focus group may well have added to the richness of the data collected. However, the justification for not undertaking focus groups (in chapter 3) is valid as it would have been extremely challenging to organise with participants. This conclusion is based on the experience of the author when gathering data via the questionnaires.

5.4 Possible Further Research Areas

There are a number of avenues for future research arising from the current study. Included could be a longitudinal study of the benefits to students who undertake a transition-related module(s). This could include an appraisal of the extent to which coverage of the module impacts on progression/retention statistics. A future research project designed to explore why certain HEIs do not have a dedicated transition-related module(s) represents another distinct investigative opportunity. The respective approaches could then form the basis for a comparison between the progression/retention statistics to determine if there are any differences between the particular HEIs which participate and those not involved

An additional potential area that the author contends should be further researched is the methodology surrounding programme or module evaluation. There is no shortage of literature on the topic. The course evaluation questionnaire (CEQ) and student engagement questionnaire (SEQ) are valid and proven evaluation tools, albeit with limitations. However, employing such tools within an Irish context has proved to be a challenge in particular with regards to possible trade union resistance. The evaluation technique used in this research study is a combination of the CEQ and the Irish student engagement survey in order to combine the most appropriate elements of each for use in an Irish context. Even these have their limitations and may not provide sufficient detail and depth to complete a forensic evaluation. The author proposes that further research at doctorate level is required in the field of evaluation in particular in the field of Irish Higher Education with a view towards the development of a fair, unambiguous, robust, rigorous and easy-to-use evaluation process for modules across the sector.

5.5 Concluding Remarks

This chapter outlined the conclusions and recommendations of this research project in the context of the research aims and objectives including setting out the potential biases and limitations of the study and identifying potential further research areas including bringing to a close an arduous, yet enjoyable journey that has been this doctoral study programme, with the completion of this research project. This thesis is the first research study undertaken into transition-related developmental modules in Irish Higher Education and their effectiveness. In this regard, the author argues that it makes a positive contribution to the literature on transition to HE within an Irish context. It confirms the substantive literature on the Leaving Certificate programme in terms to the level of unpreparedness of students for the demands and opportunities within HE. The study discovers that students' overall perceptions of the module(s) are positive and that the confidence gained from undertaking presentations (in particular group-based) is a particularly strong feature.

The delivery approach taken by the HEIs included in this research is at variance with the literature in that all the HEIs are adopting a standalone as opposed to an embedded teaching model. Based on this study, the challenge for HEIs is to integrate these modules with the

remainder of the curriculum. In this regard, cross-modular assessment offers much potential. Students' views on self-theories are affirmative of a growth mindset outlook which offers opportunities to shape their academic self-efficacy through the inclusion of self-theory concepts within the module indicative content. The research finds that the role of the academic staff member teaching the module is key, aligned to an essential participatory approach to teaching and learning. For any HEI considering adopting of such a module(s), there is no requirement to 'reinvent the wheel' as there is a substantial body of literature and knowledge that can be leveraged for their benefit.

The learning both on a personal and professional level has been immense from the commencement of the programme in late 2012 and to completion in late 2017, containing many ups, downs and challenges to be overcome both personal and professional. Reflecting on the research process a greater response rate would have been preferable. This was frustrating, as was not being able to secure approval to undertake the questionnaire with students in the university context. However, the author believes these challenges were a key part of the learning process. The skills and competencies gained during this time are now embedded in my professional practice. The literature and findings of this research have already impacted on the practise and delivery model of the transition related module in the institute where the author is employed, in particular, via the integration of the stand-alone delivery model with other modules in the first year of a study programme. My position as Dean of Faculty affords the opportunity to implement the findings to the benefit of future learners and to provide some leadership in this field.

In part to disseminate the findings of this research and more specifically to afford the opportunity for academic staff delivering such modules in Ireland to share their experiences the author organised and hosted (in his institution) the first seminar for those involved in teaching transition-related modules in Business Schools in Irish HEIs during this past academic year. The event was attended by academic staff from six HEIs and it hoped to organise and expand the event on an annual basis. This would afford the opportunity for such staff to network, share their experiences, and build towards a national community of good practice. It is hoped that this research will make a contribution to both academic staff delivering this

module and decision makers within HEIs with or considering transition related modules as part of the boarder focus on the first year student experience.

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Appendix A – Examples of module descriptors for transition-related module(s) included in this research

Example A

Effective Learning and Development			
Credits	5	Subject	Business
Level	1	School	Business
Semester	 Semester One	Module Coordinator	

Two key priorities in today's organisation are reflective practitioners and ongoing professional development. ELD is the first part of the personal development pillar running through the xxxx, building toward a fully developed Personal Development Portfolio (PDP) in your final year.

This foundational module examines how to effectively manage your own learning and development throughout your time at xxx. The focus is on harnessing and developing your academic skills and work strategies through informed self-awareness, goal setting, and action learning. Such skills include planning and decision making, team participation, communication, project management, critical thinking and the design and delivery of a business presentation.

A key part of this process is documenting evidence of your ongoing academic and skill development. You will locate this in a personal professional web blog. You will start this process in ELD, refining and progressing it throughout your XXXX and use it to inform your career plan and develop your PDP in final year.

The ongoing cycle of documenting, reflecting, planning and action will help you to think about and work towards the behaviours and skills required to achieve your academic and life goals. In this process you will develop a greater awareness of self and other, and so learn to work more effectively both individually and in collaboration as you move through college and onto your chosen career path.

Assessment will be by individual and group assignments which will be held throughout the course of the module. Through each assignment you will learn how to practice key skills such as concentration, listening, note taking, critical thinking, prioritising, formal writing, communicating and presenting persuasively.

What will I learn?

On completing this module, students should be able to:

- Understand the skills and behaviours that contribute to effective learning, academic success, and business professionalism
- Document and reflect on your ongoing academic and personal skill development
- Demonstrate enhanced interpersonal and communication skills (both verbal and written)
- Engage critical thinking skills in analysing information
- Evaluate the effectiveness of your behaviour and that of others in various work groups.
- Follow a process to plan, practise, and monitor your on-going academic and professional development.

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How will I learn?

	Hrs/Semester
Small Group	24
Specified Learning Activities	40
Autonomous Student Learning	50
Total Workload	114

How will I be assessed?

	% of Final Grade	Timing
Assignment: Critical Analysis Report	20	Unspecified
Assignment: Project Management Report	20	Unspecified
Portfolio: Learning Portfolio	40	Unspecified
Presentation: Presentation	20	Unspecified

What happens if I fail?

Compensation

This module is not passable by compensation

Resit Opportunities

In-semester assessment

Remediation

If you fail this module you may repeat, resit or substitute where permissible

Am I eligible to take this module?

Module Requisites and Incompatibles

Pre-Requisite :

Required :

Co-Requisite :

Incompatibles : Mastering University Learning (BMGT10130)

Additional Information :

Equivalent Modules

Example B

Short Title:	Learning to Learn at Third Level APPROVED
Full Title:	Learning to Learn at Third Level
Language of Instruction:	English

Module Code:	LEAR H1001
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Credits:	5
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NFQ Level:	6
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Field of Study:	General Programmes
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Module Delivered in	38 programme(s)
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Reviewed By:	
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Module Author:	XXXXXXXX
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Module Description:	The aim of the module is to develop the necessary learning strategies and study skills to adapt to a third- level educational environment. The module will also encourage and motivate students to become reflective, independent learners.
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Learning Outcomes	
<i>On successful completion of this module the learner will be able to:</i>	
LO1	Identify personal strengths and weaknesses as a learner, set specific learning goals and create a personal learning plan.
LO2	Study effectively as an independent learner and work collaboratively as a member of a team.
LO3	Manage time efficiently with regard to planning and organising learning tasks.
LO4	Use critical thinking and analytical skills to solve a variety of problems.
LO5	Write a research-based report and make an effective presentation.
LO6	Recognise the importance of academic integrity and identify ways of avoiding plagiarism in academic work through appropriate referencing.

Pre-requisite learning
Co-requisite Modules
No Co-requisite modules listed

Module Content & Assessment

Content (The percentage workload breakdown is indicative and subject to change)	%
Note: Discipline-specific examples will be used throughout the module.	0.00%
Preparing for Effective Learning Rationale for Learning to Learn module; Learning at third level (teaching methods/styles – lectures, labs, tutorials; learning outcomes, assessment approaches, GPA, ECTS, timetables, independent learning, extra-curricular activities); Responsibilities as a learner (student learning agreement); Using technology to support learning (Moodle, IT skills, file storage, printing, email); Using the Library and other academic supports; Learning context (exploring the context and connectivity of learning and linking learning to college, work and life).	15.00%
Learning Strategies Understanding intelligence and learning (what is learning, learning preferences, multiple intelligences, thinking about your learning); Learning strategies (factors for effective learning; active learning; reflective learning, learning journals); Effective note-making (summarising material, mind-mapping, concept-mapping); Effective reading skills (planning your reading, active reading, skimming); Creative thinking, critical thinking, and problem-solving (what is it; why is it important; critical reading).	17.00%
Groupwork and Collaborative Learning Approaches Rationale for groupwork (skills gained and implications for further study, work and life); Groupwork techniques (guidelines for effective groupwork, organising study groups, completing group assignments, assigning roles and tasks, being an effective group member, dealing with difficulties in groupwork); Using intrapersonal and interpersonal skills in groupwork (talking and listening skills, negotiation, leadership, giving and receiving criticism).	17.00%
Communication Skills and Interpersonal Skills Basic communication models; Listening skills; Skills for communicating with others (class conduct, professional communications); Presentation skills; Understanding and respecting diversity (perception, other cultures/backgrounds, disability); Visual communication skills (graphs, charts, images).	17.00%
Self Management and Personal Development Recognising strengths and weaknesses; Setting goals; Time management and balancing college work and life; Organisation skills (planning, prioritising, procrastination); Stress management; Diet and nutrition	17.00%
Information Skills and Academic Writing What are information skills and why are they important?; Information sources and types; Finding information; Evaluating information; Using and communicating information; Referencing and plagiarism; Academic writing (writing styles, planning your work; starting to write; developing your writing)	17.00%

Assessment Breakdown	%
Course Work	100.00%

Course Work				
Assessment Type	Assessment Description	Outcome addressed	% of total	Assessment Date
Project	Project or group project, including a written research-based report and presentation. (The presentation can be an individual/group/poster presentation). Project ideas will be provided. The project can be linked with another module within the programme.	2,3,4,5,6	40.00	Programme Board to Provide Date
Multiple Choice Questions	Online assessments/quizzes or the Library tutorials (which will be integrated with the virtual learning environment (VLE) to facilitate grading). 1) Getting Ready for Academic Study Assessment 2) Reading and Note-Making Assessment 3) Critical Thinking Skills Assessment 4) Writing Skills Assessment 5) Referencing and Plagiarism Assessment	3,4,6	20.00	Programme Board to Provide Date
Presentation	Individual Assessment. Each student shall present on a topic decided by the module lecturer.	1,3,4,6	40.00	Week 10

No End of Module Formal Examination

Reassessment Requirement
Coursework Only <i>This module is reassessed solely on the basis of re-submitted coursework. There is no repeat written examination.</i>
Reassessment Description The assessment of this module is linked to delivery. All assessments must be completed in order to meet the learning outcomes of the module.

Module Workload

Workload: Full Time				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecturer-Supervised Learning (Contact)	Lectures/Tutorials/Workshops	3.00	Every Week	3.00
Independent Learning Time	Independent Learning	6.00	Every Week	6.00
Total Weekly Learner Workload				9.00
Total Weekly Contact Hours				3.00

Workload: Part Time				
Workload Type	Workload Description	Hours	Frequency	Average Weekly Learner Workload
Lecturer-Supervised Learning (Contact)	Lectures/Tutorials/Workshops	2.00	Every Week	2.00
Independent Learning Time	Independent Learning	7.00	Every Week	7.00
Total Weekly Learner Workload				9.00
Total Weekly Contact Hours				2.00

Module Resources

<i>Required Book Resources</i>
Stella Cottrell 2008, <i>The study skills handbook</i>, Palgrave Macmillan Basingstoke [ISBN: 0230573053]
<i>Recommended Book Resources</i>
Stella Cottrell 2010, <i>Skills for success: the personal development planning handbook</i>, Palgrave Macmillan Basingstoke [ISBN: 9780230250185]
<i>Recommended Article/Paper Resources</i>
HETAC 2009, <i>Assessment and Standards</i>
<i>Other Resources</i>
Website: n/a http://www.hetac.ie/docs/Assessment_and_Standards_2009%20Published.pdf Website: Research / Referencing / Plagiarism / Literature Review http://millennium.it-tallaght.ie/screens/tut.html Website: LearnHigherLearnHigher Resources http://www.learnhigher.ac.uk Booklet: 2012/ITT Dublin Introductory IT Handbook, CeLT in ITT Dublin



BUS06054 Learning and Development for Higher Education

Transcript Title	Learning & Development for HE		
Full Title	Learning and Development for Higher Education		
Attendance	75	Award Area	Business
Coordinator	Jason Palframan	Department	Business & Mgmt Studies
Co Author(s)	Joseph Egan		
Official Code	BUS06054	NFQ Level	06
		ECTS Credit	05

Module Description

The aim of this module is to support students in their transition to becoming independent learners in higher education underpinning professional development by enabling them to develop a range of skills and strategies essential to personal and professional development.

Learning Outcomes

On completion of this module the learner will/should be able to

1. Identify personal learning styles and develop appropriate learning strategies.
2. Recognise the importance of self awareness and acquire the skills of self appraisal through reflection and self evaluation in order to deal confidently with difficult situations in a learning and business environment.
3. Develop appropriate communication skills within a range of social and professional situations.
4. Develop competent academic and business writing skills.
5. Apply appropriate study skills, time management techniques, assessment methods, examination techniques and group work practices to underpin professional development.

Teaching and Learning Strategies

Teaching and learning will include lecture, group interaction, audio and visual learning and reflection.

Assessment Strategies

Continuous assessment through: an individual research project, a group project, a group presentation and an individual reflective report.

Repeat Assessment Procedures

Repeat assessments are offered in line with the Business School policy as per Programme Manuals.

Module Dependencies

Indicative Syllabus

1. Self management

Personal development plan, goal setting, reflective practice and emotional intelligence, building resilience, career path analysis and development.

2. Time management

Organising life in college, managing stress, task planning.

3. Learning and skills

Active learning, Kolb learning styles, VARK inventory.

4. Effective study skills

Note taking strategies, accessing learning resources, SQ3R method, mind mapping.

5. Thinking and memory skills

Critical thinking, analysis and evaluation skills, memory strategies.

6. Developing writing skills

Planning, writing and editing, plagiarism and references, report writing.

7. Presentation skills

Planning, structuring and delivering.

8. Doing exams and assignments

Planning and preparation.

9. Working in teams

Group development, effective team behaviours.

CourseWork / Assessment Breakdown

CourseWork / Continuous Assessment	100 %
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Coursework Assessment Breakdown

Full Time Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
Lecture	Lecture Theatre	Lecture & Practical exercises	3	Weekly	3.00
Independent Learning	Not Specified	Independent Learning	5	Weekly	5.00

Total Average Weekly Learner Workload 3.00 Hours

Online Learning Mode Workload

Type	Location	Description	Hours	Frequency	Avg Wkly Wrkld
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Total Average Weekly Learner Workload 0.00 Hours

Module Resources

Module Book Resources

None

Module Alternate Book Resources

None

Module Other Resources

http://www.skills4studycampus.com/Instructor_Home.aspx

<http://www.theysayiblog.com/>

<http://books.wwnorton.com/books/webad.aspx?id=4294977401>

Module URL's

<http://www.palgrave.com/companion/Cottrell-Study-Skills-Handbook/#>

<http://www.howtostudy.org/>

<http://www.palgrave.com/studentstudyskills/page/index/>

<https://owl.english.purdue.edu/owl/section/1/2/>

Additional Information

<http://www.ait.ie/careersoffice/>

Appendix B – Questionnaire employed for data collection with students

Questionnaire – Transition Related Module (title of the module was modified for each site all other questions were the same)

I consent to participating in this research (please tick one): ☐ Yes ☐ No

All participants in this questionnaire will remain anonymous and all information gathered will be held confidentially and used for academic purposes only.

1. Gender: ☐ Male ☐ Female
2. Age: ☐ 16 - 18 ☐ 19 – 21 ☐ 22-25 ☐ 26+
3. Year of Study: ☐ First year ☐ Second year ☐ Third year ☐ Fourth year
4. HEI: ☐ Site 1 ☐ Site 2 ☐ Site 3

5. The name of the programme or course you are currently undertaking (abbreviation is fine)

6. Which of the following would best describe your attendance at Learning to Learn at Third Level lectures?

☐ 0 – 25% ☐ 26% – 50% ☐ 51%- 75% ☐ 76%-100%

7. Could you please rate your overall experience of the Learning to Learn at Third Level module?

☐ Excellent ☐ Good ☐ Fair ☐ Poor

8. Approximately how many hours per week do you spend in a typical seven-day week doing each of following?

Academic Activities (e.g. studying, preparing for lectures, reading, doing assignments etc.)

☐ None ☐ 1 to 5 ☐ 6 to 11 ☐ 12 to 17 ☐ 18 to 23 ☐ Over 24

How does this compare with amount of study for the Leaving Certificate?

☐ A lot Less ☐ Less ☐ About the same ☐ More ☐ A lot More

9. How often have you done the following in your Learning to Learn at Third Level lectures?
(please tick one box for each line)

	Very Often	Often	Sometimes	Never
Asked questions or contributed to discussions in class or online				
Discussed ideas from your readings or class projects with your lecturer outside of class				
Made a class or online presentation				
Prepared two or more drafts of a paper or assignment before submitting it				
Worked on a paper or project that required integrating ideas or information from various sources				
Included diverse perspectives (different nationalities, religions, genders, political beliefs, etc.) in class discussions or writing assignments				
Came to class without completing readings or assignments				
Worked with other students on projects during class				
Worked with classmates outside of class to research class assignments				
Worked with classmates outside of class to prepare class assignments				
Put together ideas or concepts from different courses when completing assignments or during class discussions				
Used an electronic medium (Web 2.0 tools, google drive/docs, chat groups, instant messaging, etc.) to discuss or complete an assignment with other classmates				
Used Moodle				
Discussed grades or assignment feedback with your lecturer				
Worked harder than you thought you could on assignments				
Discussed ideas from your classes with others outside of class (students, family members, co-workers, etc.)				

10. Please rank the following statement in relation to the Learning to Learn at Third Level module?

(please tick one box for each line)

	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
The module helped me to develop the ability to plan my own work					
The library resources met my needs for this module					
The study materials were clear and concise					
It was made clear what resources were available to help me learn					
Course materials were relevant and up to date					
Where it was used, the information technology in teaching and learning was effective					
The module helped me develop my ability to work as a team member					
The module sharpened my analytical skills					
I found the module interesting and thought provoking					
The module developed my problem solving skills					
The module improved my skills in written communication					
As a result of the module, I feel confident about tackling unfamiliar problems					

- 11.** How much has Learning to Learn at Third Level module emphasised the following?
(please tick one box for each line)

	Very Much	Quite a bit	Some	Very Little
Time Management				
Plagiarism				
Types of Learning Styles				
Methods of Note Taking				
Personal Development Plans				
Learning Portfolio				
Group Work / Team Working Skills				
Learning with Moodle				
Thinking and Memory skills				
Study Skills				
Research Skills – sourcing information				
Developing Writing skills				
Problem Solving skills				
Communication skills				
Presentation skills				
Stress Management				
Reflective practice				
Goal Setting				
Exam Preparation and Techniques				
Other: Please specify				

- 12.** Please select the range of assessment you worked on either individually or in a group?
(please tick one box for each line)

	Very Much	Quite a bit	Some	Very Little	N/A
Open Book Test					
Essay					
Other submitted piece of writing e.g. academic paper review					
Oral Examination					
Case Study					
Real Life Problem Solving project					
Reflective Journal					
Learning Log					
Multiple Choice questions/tests					
Participation in class discussion					
Student presentation					
Role Playing					
Personal Development Plan					
Other: Please specify					

13. To what extent has your experience with the Learning to Learn at Third Level module contributed to your knowledge, skills and personal development in the following areas?
(please tick one box for each line)

	Very Much	Quite a bit	Some	Very Little
Managing your time				
Writing clearly and effectively				
Thinking critically and analytically				
Developing your creative skills				
Working out problems				
Working with others				
Setting Goals				
Learning on your own				
Learning with other students/peers				
Using information technology				
Processing and understanding information				
Making a presentation				
Understanding yourself				
Understanding of other people				
Developing a personal code of values and ethics				
Managing Stress				
Overall academic performance				

14. Reflecting on your studies overall to what extent do you believe that the Learning to Learn at Third Level module has assisted with the following academic activities?
(please tick one box for each line)

	Very Much	Quite a bit	Some	Very Little
Memorising facts, ideas or methods from our subjects and reading				
Analysing the basic elements of an idea, experience or theory, such as examining a particular case or situation in depth and considering its components				
Synthesising and organising ideas, information or experiences into new, more complex interpretations and relationships				
Making judgements about the value of information, arguments or methods, such as examining how others gather and interpret data and assessing the soundness of their conclusions				
Applying theories and concepts to practical problems or in new situations				

- 15.** Please indicate the extent to which you agree or disagree with each of the following statements? *(please tick one box for each line)*

	Strongly Agree	Agree	Mostly Agree	Mostly Disagree	Disagree	Strongly Disagree
You have a certain amount of intelligence, and you can't really do much to change it						
Your intelligence is something about you that you can't change very much						
No matter who you are, you can significantly change your intelligence level						
To be honest, you can't really change how intelligent you are						
You can always substantially change how intelligent you are						
No matter how much intelligence you have, you can always change						
You can change even your basic intelligence level considerably						

- 16.** What are the BEST ASPECTS of the module (i.e. elements you enjoyed / found interesting / useful in subsequent modules)?

- 17.** Any aspects of the module you think could be improved / amended to enhance the module?

Appendix C – Semi-structured interview questions

Can you outline the rationale for adopting this Effective Learning and Development/Learning to Learn at Third Level/Learning and Innovation Skills Module/Learning to Learn?

Do you believe the leaving certificate prepares students for the demands of Higher Education and why?

Did the National Strategy for HE to 2030 have any influence? Your own strategic plan?

Was the level of Non-Progression from year 1 to year 2 a factor in introducing such a module?

How many years have you been offering the module?/ Can you recall the year the module was introduced

Did you introduce the module on a pilot/phased basis or big bang approach?

Did you encounter much resistance to the adoption of such a module?

Was there one individual who was a driver for the adoption and if so whom?

Do you have domain specific or generic across all faculties/schools module?

Was there much discussion around whether it should be a mandatory module rather than an elective? Reasons for making it a mandatory module?

Who designed/drafted the module, one individual or a team?

Did you reference any academic literature on this area during the design process? If so who?

Did you consider embedded the module in the content of a number of 1st year modules?

Do you believe the leaving certificate prepares students for the demands of Higher Education and why?

How much has the module evolved over the past number of years?

Have you undertaken any evaluation of the module? If so, did you use any specific methodology?

What was the outcome of the evaluation? Any results that surprised you? Influence of the evaluation on the module content?

Have you monitored the level of progression from year 1 to year 2 since this module was introduced and if so has there been any impact on the level of progression/non progression?

Did you set any guidelines for the delivery model for the module, e.g. one per class group, in groups of say x number of students?

In your opinion what would be the most appropriate Teaching and Learning philosophy/approach for this module?

In your opinion what the most appropriate assessment methodology for the module? Any terminal examinations? Justification for assessment methods employed?

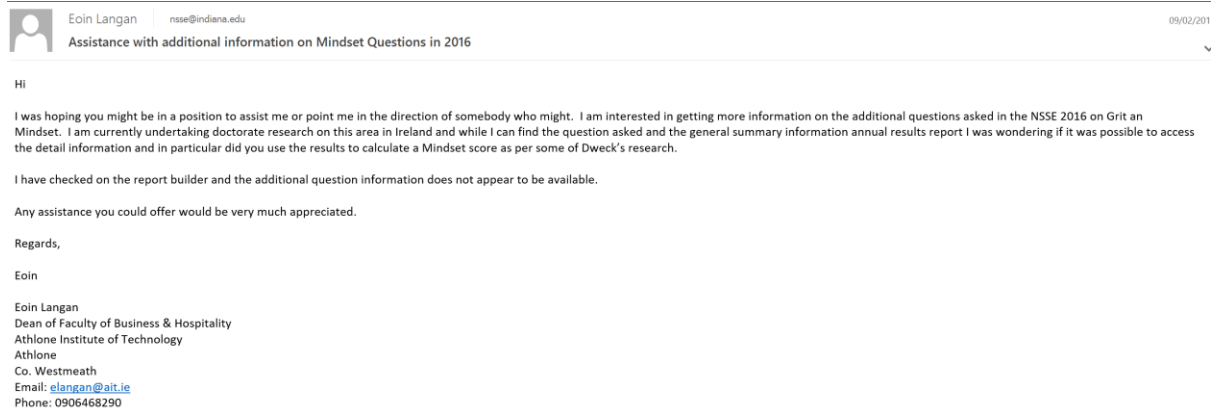
How would you rate the role of the member of the academic staff delivering the module?

Would you say that it anybody can teach the module just because they have a few spare hours?

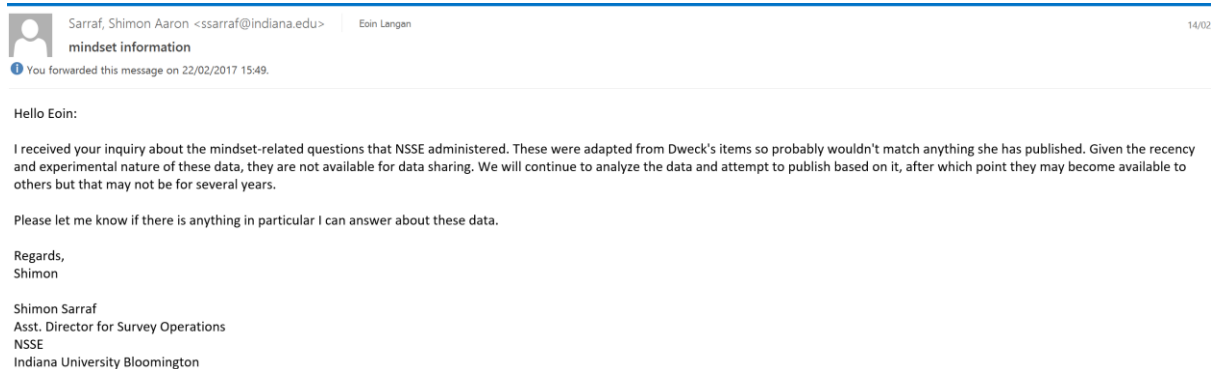
If you were to develop a model of good practice to be used in Irish HEIs delivering this module what would you suggest should be included?

Appendix D- Correspondence with the US National Student Engagement Survey (NSSE)

First email sent 09/2/2017



Reply received 14.02.2017



Appendix E – Full results of Questionnaire distributed to students

Questionnaire Results

Question 1 – Gender

Gender		
Answer Options	Response Percent	Response Count
Male	60.6%	197
Female	39.4%	128
<i>answered question</i>		325
<i>skipped question</i>		0

Question 2 – Age

Age		
Answer Options	Response Percent	Response Count
16-18	3.7%	12
19-21	62.5%	203
22-25	19.7%	64
26+	14.2%	46
<i>answered question</i>		325
<i>skipped question</i>		0

Question 3 – Year of Study

Year of Study		
Answer Options	Response Percent	Response Count
First Year	8.6%	28
Second Year	20.9%	68
Third Year	56.3%	183
Fourth Year	14.2%	46
<i>answered question</i>		325
<i>skipped question</i>		0

Question 4 – Higher Education Institution

HEI		
Answer Options	Response Percent	Response Count

Site 1	59.1%	192
Site 2	40.9%	133
<i>answered question</i>		325
<i>skipped question</i>		0

Question 5 – Programme Name

ID	Name of the programme or course you are currently undertaking (abbreviation is fine)		
	Open-Ended Response		
3922230638	AIS		
3922249593	Bachelor of Business (Honors)		
3922252852	Information System Management (ISM)		
3922270832	Business level 8		
3922273673	ISM		
3922284659	AIS Level 7 Second Year		
3922286286	Business level 8		
3922304604	Bachelor of Business (Honours)		
3922462826	Administration information systems		
3922487135	Bachelor of Business (Hons) level 8		
3922507944	AIS		
3922514698	BBS		
3922533005	BBS (hons)		
3922548498	AIS		
3922555589	BBS level8		
3922566143	ISM		
3922587404	Bachelors of Business level 8		
3922588243	BBS		
3922612899	BBS		
3922615466	Bachelor of Business (Hons)		
3922633230	BBSL8		
3922635688	BBS level 8		
3922662352	Bachelor of Business studies level 8		
3922691988	BBS level 8		
3922714358	BBS		
3922743951	BBS level 8		
3926802481	Rural Enterprise and Agnbusiness		
3926802502	Bachelor of Business		
3926812777	Bachelor of Business Studies level 8		
3926815983	Bachelor Business Rural Enterprise and Agri-Business		
3926822039	Bachelor of Business level 8		
3926828266	Agri and environmental Management		
3926831920	Bachelors of Business level 8		

3926837715	BSc Agriculture and Environmental Management		
3926842495	Business level 8		
3926844238	Agri-Business		
3926852537	Agriculture and Environmental Management		
3926853911	Business		
3926861727	Rural enterprise and Agri-Business		
3926884311	Agri-Business and rural land management		
3926891780	Agri and Environmental Management		
3926904812	Business		
3926914126	BBS		
3926968667	BRUAG		
3926976503	Agri-Business		
3926981235	Business		
3926984231	BRUAG_07		
3926991307	SAGRI		
3926998839	Rural Enterprise		
3927013330	BRUAG		
3927020680	BBS		
3927029543	Environmental science SAGRE		
3927037680	BBS		
3927051591	BSc in environment management and science		
3927063349	Environmental Science (SAGRI)		
3927070969	BSe in Agriculture and environmental Management		
3927081497	Rural Enterprise and Agribusiness		
3927247348	BBS in Rural Enterprise and Agribusiness		
3927260906	SAGRI		
3927272288	Rural enterprise and agri-business		
3927283635	Rural Enterprise and Agri Business		
3927307699	BSc Agriculture and Environmental Management		
3927322217	Rural Enterprise and Agri Business		
3927335681	Rural Enterprise and Agri business		
3927354385	Rural Enterprise and Environmental Science		
3927377922	Agri-Business		
3927384705	AIS		
3927407995	Rural Enterprise and Agri-Business		
3927425501	BBs in Rural Enterprise and Agribusiness		
3927452743	BBS in Rural Enterprise and Agribusiness		
3927488840	Agriculture and Environmental Management		
3927511192	BSc Agriculture and Environment Management		
3927532924	SAGRI		
3927636257	AIS		
3927639868	AIS		
3927655336	AIS		

3927656868	BBS		
3927672765	AIS		
3927689199	Bachelor of Business		
3927692177	Bachelors of Business		
3927713464	BBS		
4250524139	BBS Managment		
4250528403	BBS Management		
4250530863	BBS Management		
4250534258	BBS Management		
4250537429	BBS Management		
4250539859	BBS Management		
4250577774	BBS Management		
4250582076	BBS Management		
4250585416	BBS Management		
4250588146	BBS Management		
4250590777	BBS Management		
4251408698	BBS Management		
4251410867	BBS Management		
4251412883	BBS Management		
4251416529	BBS Management		
4251418469	BBS Management		
4251483440	BBS Management		
4251485937	BBS Management		
4251489024	BBA Management		
4251491341	BBS Management		
4251493439	BBS Management		
4251496453	BBS Management		
4251498435	BBS Management		
4251559763	BBS Management		
4251563286	BBS Management		
4251566372	BBS Management		
4251569233	BBS Management		
4251571714	BBS Management		
4251574889	BBS Management		
4251577421	BBS Management		
4251581504	BBS Management		
4251594922	BBS Accounting		
4251602364	BBS Accounting		
4251605742	BBS Accounting		
4251608878	BBS Accounting		
4251612472	BBS Accounting		
4251614946	BBS Accounting		
4251618521	BBS Accounting		

4253826294	BBS Accounting	
4253837920	BBS Accounting	
4253846616	BBS Accounting	
4253856034	BBS Accounting	
4253863682	BBS Accounting	
4253871618	BBS Accounting	
4253881369	BBS Accounting	
4253889683	BBS Accounting	
4253898299	BBS Accounting	
4253906261	BBS Accounting	
4253915297	BBS Accounting	
4265032283	BBS Accounting	
4265035412	BBS Accounting	
4265037613	BBS Accounting	
4265039640	BBS Accounting	
4265041608	BBS Accounting	
4265043713	BBS Accounting	
4265045944	BBS Accounting	
4265048207	BBS Management	
4265050770	BBS Accounting	
4265054830	BBS Accounting	
4265057831	BBS Accounting	
4265060604	BBS Accounting	
4265063162	BBS Acccounting	
4265103417	BBS Accounting	
4265105684	BBS Accounting	
4265108338	BBS Accounting	
4265113398	BBS Accounting	
4265116011	BBS Accounting	
4265118129	BBS Accounting	
4265122445	BBS Accounting	
4265126413	BBS Accounting	
4265128786	BBS Accounting	
4265130857	BBS Accounting	
4265143761	BBS Accounting	
4265145684	BBS Accounting	
4265148578	BBS Accounting	
4265150882	BBS Accounting	
4265152834	BBS Accounting	
4265155027	BBS Accounting	
4265156962	BBS Accounting	
4265160722	BBS Accounting	
4265163803	BBS Accounting	

4265192786	BBS Management	
4265195756	BBS Management	
4265198849	BBS Management	
4265203917	BBS Management	
4269856714	BBS Management	
4269860418	BBS Management	
4269863957	BBS Management	
4269867336	BBS Management	
4269871804	BBS Management	
4269875645	BBS Management	
4269881745	BBS Accounting	
4269885282	BBS Accounting	
4269888314	BBS Accounting	
4269916561	BBS Accounting	
4269920439	BBS Accounting	
4269925924	BBS Accounting	
4269929951	BBS Accounting	
4269933602	BBS Accounting	
4269938175	BBS Accounting	
4269943577	BBS Accounting	
4269946779	BBS Accounting	
4269951468	BBS Accounting	
4269955721	BBS Accounting	
4269959832	BBS Accounting	
4269963773	BBS Accounting	
4270082360	BB in Admin & Info Systems	
4270088272	BB in Admin & Info Systems	
4270093922	BB in Admin & Info Systems	
4270098589	BB in Admin & Info Systems	
4270105855	BB Admin & Info Systems	
4270109982	BB in Admin & Info Systems	
4270696984	BB in Admin & Info Systems	
4270712064	BB in Admin and Info Systems	
4270934091	BBS Admin & Info Systems	
4271341173	BBS in Accounting	
4271538676	BBS in Accountin	
4271549675	BBS in Accounting	
4271566099	BBS in Accounting	
4271577992	BBS in Accounting	
4271590566	BBS in Accounting	
4271603906	BBS in Accounting	
4271626145	BBS in Accounting	
4272579710	BBS in Accounting	

4272584658	BBS in Accounting	
4272588200	BBS in Accounting	
4272594446	BBS in Accounting	
4272598094	BBS in Accounting	
4272601574	BBS in Accounting	
4272604246	BBS in Accounting	
4272608301	BBS in Accounting	
4272611129	BBS in Accounting	
4272615778	BBS in Accounting	
4272619655	BBS in Accounting	
4280200464	BBS in Accounting	
4280206085	BBS in Accounting	
4280207774	BBS Accounting	
4280210189	BBS in Accounting	
4280214760	ISM	
4280216711	ISM	
4280219743	ISM	
4280223057	ISM	
4280225441	ISM	
4280227694	ISM	
4280230612	ISM	
4280233239	ISM	
4285597619	ISM	
4285602613	ISM	
4285607501	ISM	
4285612002	ISM	
4288847506	BBS Management	
4288856241	BBS Accounting	
4288860475	BBS Accounting	
4288865736	BBS Accounting	
4288869237	BBS Accounting	
4288873012	BBS Accounting	
4288877111	BBS Accounting	
4288881574	BBS Accounting	
4291753556	BBS Accounting	
4291759237	BBS Accounting	
4291763244	BBS Accounting	
4291766808	BBS Accounting	
4291769944	BBS Accounting	
4291773703	BBS Accounting	
4291776967	BBS Accounting	
4291779746	BBS Accounting	
4291783346	BBS Accouting	

4294588658	BBS in Accounting	
4294592849	BBS Accounting	
4294596402	BBS Accounting	
4294600326	BBS in Accounting	
4294603693	BBS in Accounting	
4294608051	BBS Accounting	
4294612118	BBS Accounting	
4294617174	BBS Accounting	
4294621280	BBS Accounting	
4294625733	BBS Accounting	
4294707752	Agri Business	
4294713389	Agri Business	
4294721682	Agri Business	
4294729816	Agri Business	
4294736758	Agri Business	
4294752838	Agri Business	
4294758483	Agri & Environment	
4294763976	Agri & Environment	
4294770104	Agri & Environment	
4294776795	Agri & Rural	
4294799870	Agri & Environment	
4294811124	Agri Business	
4294818569	Agri & environment	
4294845301	Agri Business	
4294851581	Agri business	
4294857270	Rural & Agri	
4294864223	Rural & Agri	
4294869955	Rural & Agri Business	
4294875841	Rural & Agri	
4294881249	Agri & Environment	
4295000328	Agri & Rural	
4295010737	Agri & Environment	
4295018279	Agri-Business	
4295026068	Agri Business	
4295033183	Agri Business	
4295041983	Agri Business	
4295051191	Agri & Environment	
4295080984	Agri Business	
4295370628	BBS	
4295386444	BBS L8	
4295396352	BBS L8	
4295405892	BBS L8	
4295475998	BBS L8	

4295488375	BBS L8		
4295502231	BBS L8		
4295512528	BBS L8		
4295523333	BBS L8		
4295533885	BBS L8		
4295548839	BBS L8		
4295705643	BBS L8		
4295769426	AIS		
4295783787	AIS		
4295798100	BBS L8		
4296969886	BBS L7		
4296972099	BBS L7		
4296973800	BBS L7		
4296976278	BBS L7		
4296978573	BBS L8		
4296980648	BBS L8		
4296982798	BBS L7		
4296985148	BBS L7		
4296987080	BBS L7		
4296989451	BBS L7		
4307738696	BBS in Accounting		
4307744788	BBS in Accounting		
4307748706	BBS in Accounting		
4307752995	BBS in Accounting		
4307759301	BBS in Accounting		
4307762786	BBS in Accounting		
4307770171	BBS in Accounting		
4307774758	BBS in Accounting		
4307777802	BBS in Accounting		
4307780816	BBS in Accounting		
4307787067	BBS in Accounting		
4307791652	BBS in Accounting		
4307795546	BBS in Accounting		
A total of 325 responses were received for this question			

Question 6 – Which of the following would best describe your attendance at [relevant module name inserted] lectures

Which of the following would best describe your attendance at lectures?

Answer Options	Response Percent	Response Count
0 - 25%	3.1%	10
26% - 50%	7.1%	23
51% - 75%	30.8%	100
76% - 100%	59.1%	192
answered question		325
skipped question		0

Question 7 – Could you please rate your overall experience of the [relevant name inserted] module

Could you please rate your overall experience of the module?			
Answer Options	Response Percent	Response Count	
Excellent	15.2%	49	
Good	55.3%	178	
Fair	24.8%	80	
Poor	4.7%	15	
answered question			322
skipped question			3
			325

Question 8 - Approximately how many hours per week do you spend in a typical seven-day week doing each of following?

Approximately how many hours per week do you spend in a typical seven-day week doing each of the following?							
Answer Options	None	1 to 5	6 to 11	12 to 17	18 to 23	Over 24	
Academic Activities (e.g. studying, preparing for lectures, reading, doing assignments etc)	5	100	93	72	35	18	
answered question							
skipped question							

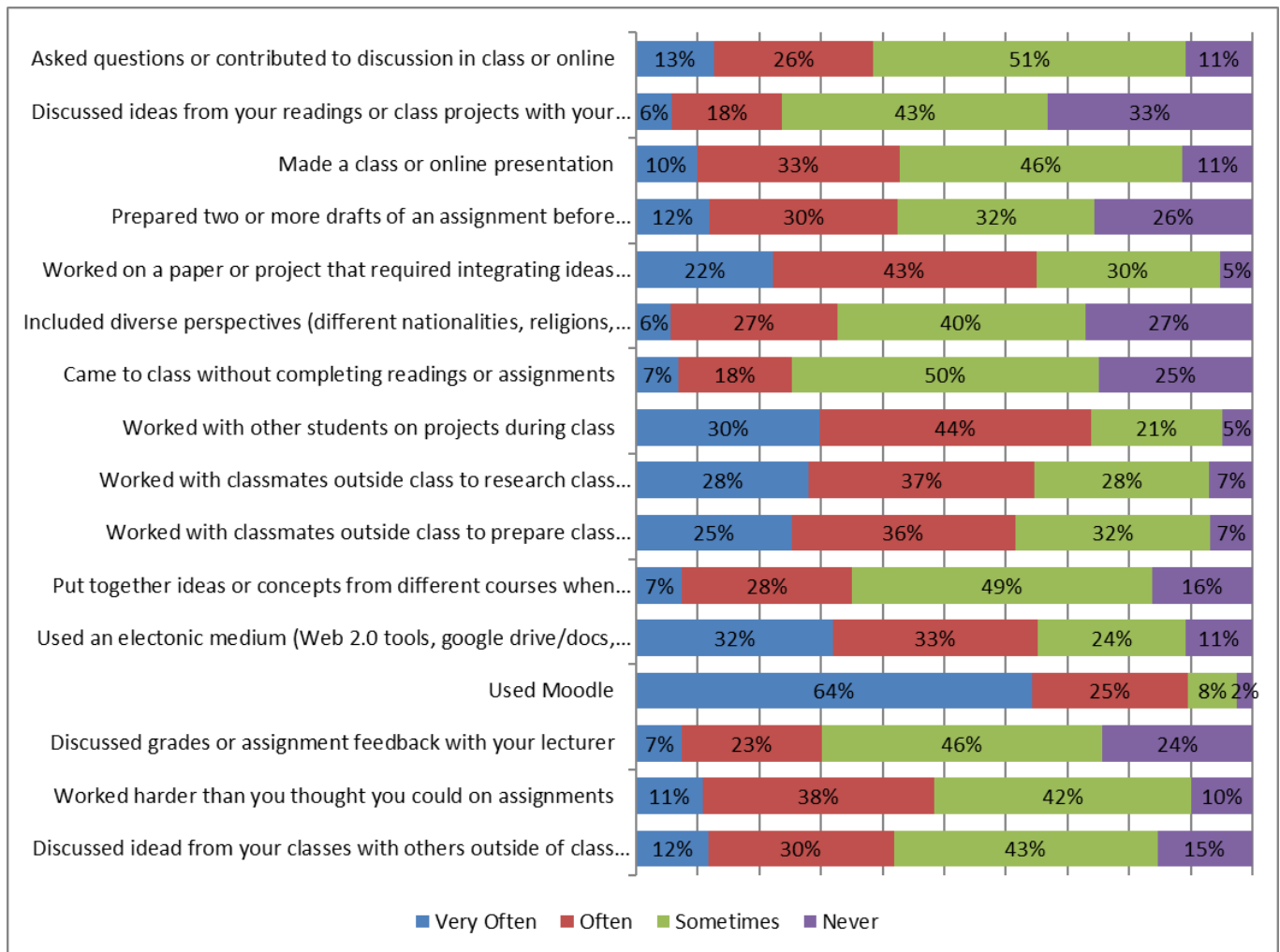
In relation to Question 8 and the amount of time you spend on academic activities, how does this compare with the amount of study you did you the Leaving Certificate?

Answer Options	Response Percent	Response Count
A Lot Less	8.6%	28
Less	29.5%	96
About the same	32.0%	104

More	16.0%	52
A Lot More	13.8%	45
<i>answered question</i>		325
<i>skipped question</i>		0

Question 9 - How often have you done the following in your [relevant module name inserted] lectures? (please tick one box for each line)

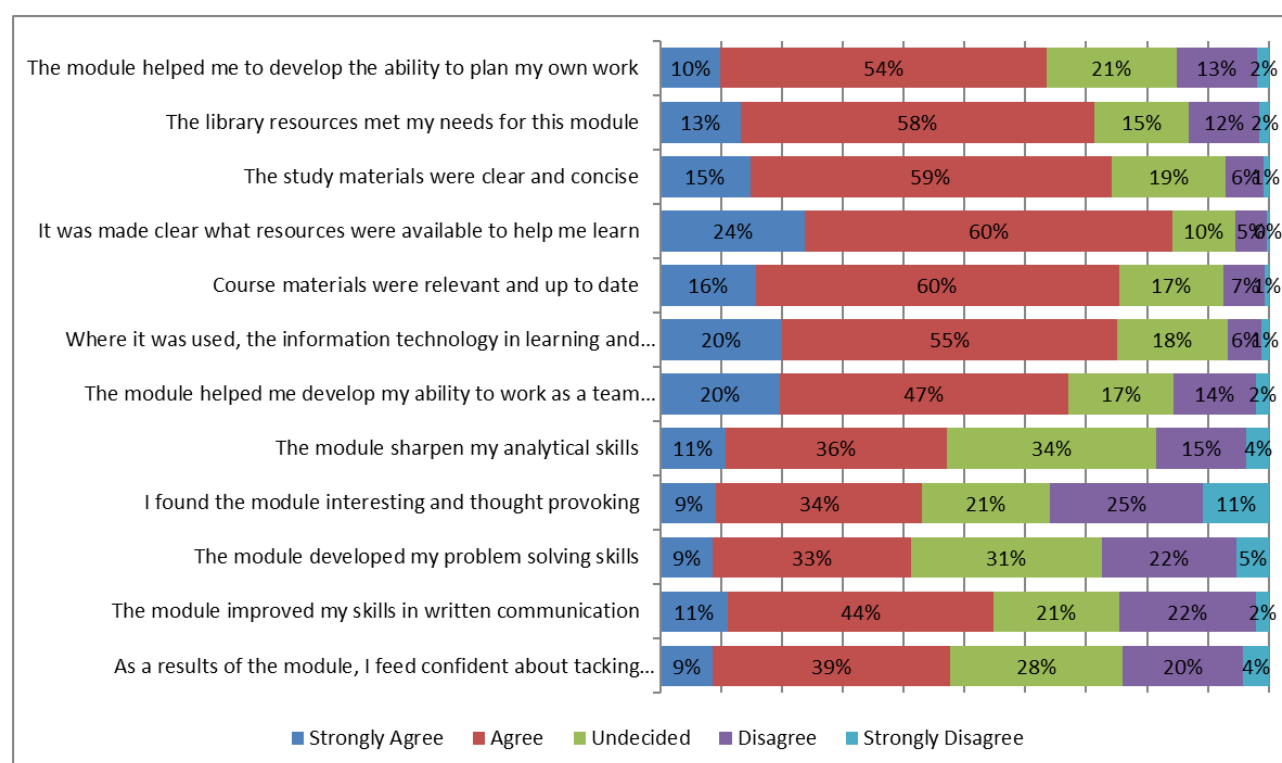
Answer Options	Very Often	Often	Sometimes	Never	Response Count
Asked questions or contributed to discussions in class or online	41	84	165	35	325
Discussed ideas from your readings or class project with your lecturer outside class	19	58	140	108	325
Made a class or online presentation	32	107	149	37	325
Prepared two or more drafts of a paper or assignment before submitting	39	99	104	83	325
Worked on a paper or project that required integrated ideas or information from various resources	72	139	97	17	325
Included diverse perspectives (different nations in class discussion or writing assignments	18	88	131	88	325
Came to class without completing reading or assignments	22	60	162	81	325
Work with other students on project during class	97	143	69	16	325
Worked with classmates outside of class to research class assignments	91	119	92	23	325
Worked with classmates outside of class to prepare class assignments	82	118	103	22	325
Put together ideas or concepts from different courses when completing assignment or during class discussion	24	90	158	53	325
Used an electronic medium (Web 2.0 tools)	104	108	78	35	325
Used Moodle	209	82	26	8	325
Discussed grades or assignment feedback with your lecturer	24	74	148	79	325
Worked harder than you thought you could on assignments	35	122	136	32	325
Discussed ideas from your classes with others outside of class (students, family members, co-workers etc)	38	98	139	50	325
<i>answered question</i>					325
<i>skipped question</i>					0
<i>Average</i>	<i>59</i>	<i>99</i>	<i>119</i>	<i>48</i>	



Responses to question 9 with percentages

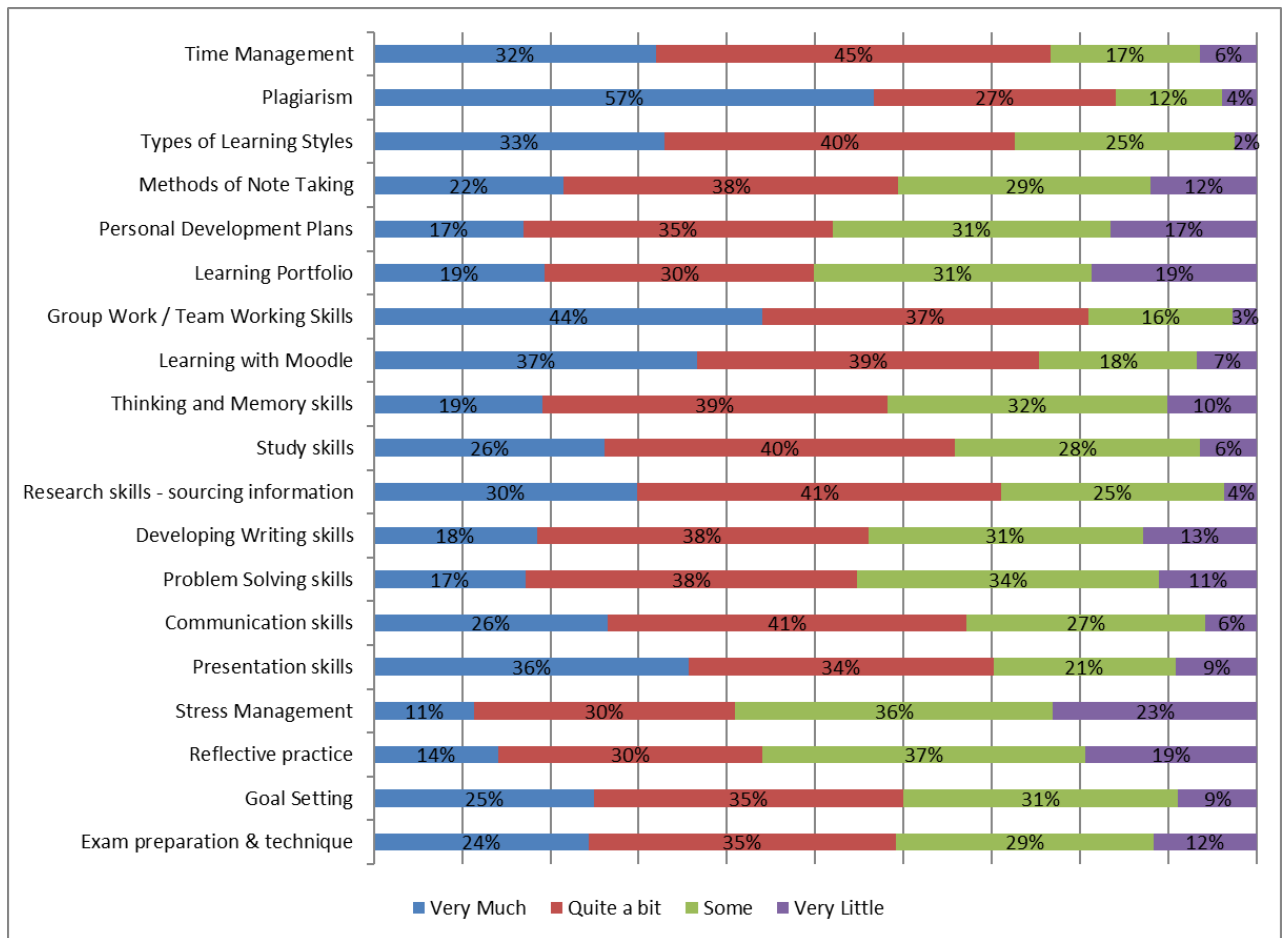
Question 10 -Please rank the following statement in relation to the [relevant name inserted] module? (please tick one box for each line)

Please rank the following statements in relation to the Learning to Learn module?						
Answer Options	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree	Response Count
The module helped me to develop the ability to plan my own work	32	174	69	43	6	324
The library resources met my needs for this module	43	189	50	38	5	325
The study materials were clear and concise	48	193	61	20	3	325
It was made clear what resources were available to help me learn	77	196	33	17	1	324
Course materials were relevant and up to date	51	194	56	22	2	325
Where it was used, the information technology in learning and teaching was effective	65	179	59	18	4	325
The module helped me develop my ability to work as a team member	64	154	56	44	7	325
The module sharpen my analytical skills	35	118	112	48	12	325
I found the module interesting and thought provoking	30	110	68	82	35	325
The module developed my problem solving skills	28	106	102	72	17	325
The module improved my skills in written	36	142	67	73	7	325
As a results of the module, I feed confident about tacking unfamiliar problems	28	127	92	64	14	325
answered question						325
skipped question						0
average	45	157	69	45	9	



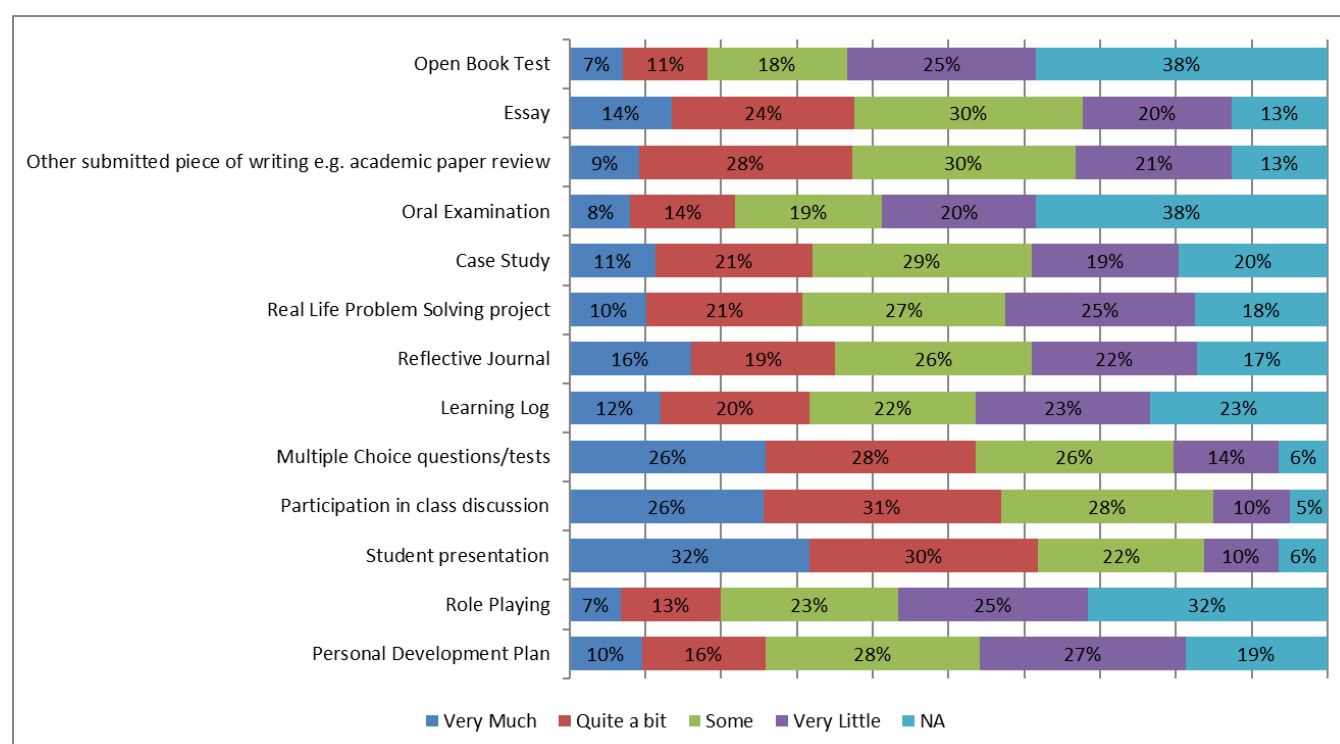
Question 11 - How much has [relevant name inserted] module emphasised the following?
(please tick one box for each line)

How much has the Learning to Learn module emphasised the following?					
Answer Options	Very Much	Quite a bit	Some	Very Little	Response Count
Time Management	104	145	55	21	325
Plagiarism	184	89	39	13	325
Types of Learning Styles	107	129	81	8	325
Methods of Note Taking	70	123	93	39	325
Personal Development Plans	55	114	102	54	325
Learning Portfolio	63	99	102	61	325
Group Work / Team Working Skills	143	120	53	9	325
Learning with Moodle	119	126	58	22	325
Thinking and Memory skills	62	127	103	33	325
Study skills	85	129	90	21	325
Research skills - sourcing information	97	134	82	12	325
Developing Writing skills	60	122	101	42	325
Problem Solving skills	56	122	111	36	325
Communication skills	86	132	88	19	325
Presentation skills	116	112	67	30	325
Stress Management	37	96	117	75	325
Reflective practice	46	97	119	63	325
Goal Setting	81	114	101	29	325
Exam preparation & technique	79	113	95	38	325
Other (please specify)					
answered question					325
skipped question					1



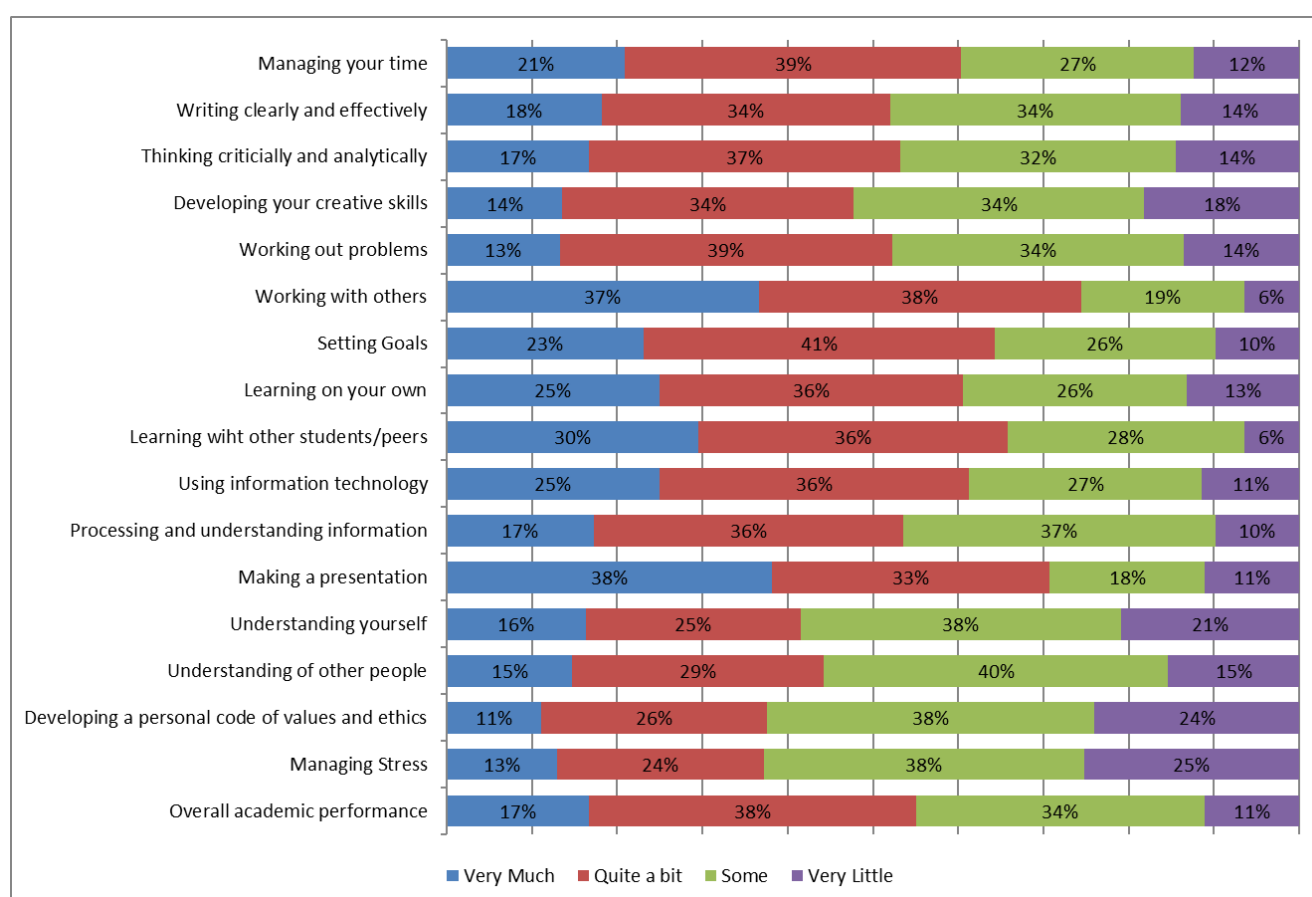
Question 12 - Please select the range of assessment you worked on either individually or in a group? (please tick one box for each line)

Please select the range of assessment you worked on either individually or in a group?						
Answer Options	Very Much	Quite a bit	Some	Very Little	N/A	Response Count
Open Book Test	23	36	60	81	125	325
Essay	44	78	98	64	41	325
Other submitted piece of writing e.g.	30	91	96	67	41	325
Oral Examination	26	45	63	66	125	325
Case Study	37	67	94	63	64	325
Real Life Problem Solving project	33	67	87	81	57	325
Reflective Journal	52	62	84	71	56	325
Learning Log	39	64	71	75	76	325
Multiple Choice questions/tests	84	90	85	45	21	325
Participation in class discussion	83	102	91	33	16	325
Student presentation	103	98	71	32	21	325
Role Playing	22	43	76	81	103	325
Personal Development Plan	31	53	92	88	61	325
Other (please specify)						
answered question						325
skipped question						0



Question 13 - To what extent has your experience with the [relevant name inserted] module contributed to your knowledge, skills and personal development in the following areas?
(please tick one box for each line)

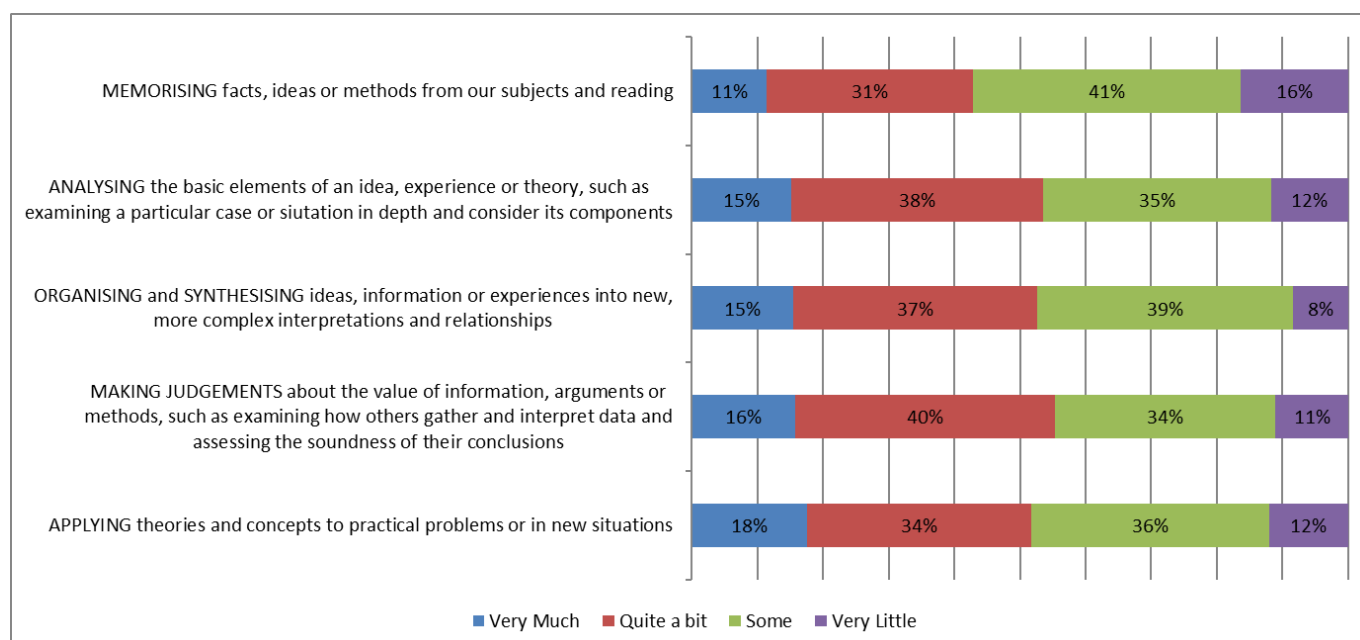
To what extent has your experience of the module contributed to your knowledge, skills and personal development in the following areas?					
Answer Options	Very Much	Quite a bit	Some	Very Little	Response Count
Managing your time	68	128	89	40	325
Writing clearly and effectively	59	110	111	45	325
Thinking critically and analytically	54	119	105	47	325
Developing your creative skills	44	111	111	59	325
Working out problems	43	127	111	44	325
Working with others	119	123	62	21	325
Setting Goals	75	134	84	32	325
Learning on your own	81	116	85	43	325
Learning wiht other students/peers	96	118	90	21	325
Using information technology	81	118	89	37	325
Processing and understanding information	56	118	119	32	325
Making a presentation	124	106	59	36	325
Understanding yourself	53	82	122	68	325
Understanding of other people	48	96	132	50	326
Developing a personal code of values and ethics	36	86	125	78	325
Managing Stress	42	79	122	82	325
Overall academic performance	54	125	110	36	325
answered question					325
skipped question					
average	67	112	102	45	



Question 14 - Reflecting on your studies overall to what extent do you believe that the [relevant name inserted] module has assisted with the following academic activities?

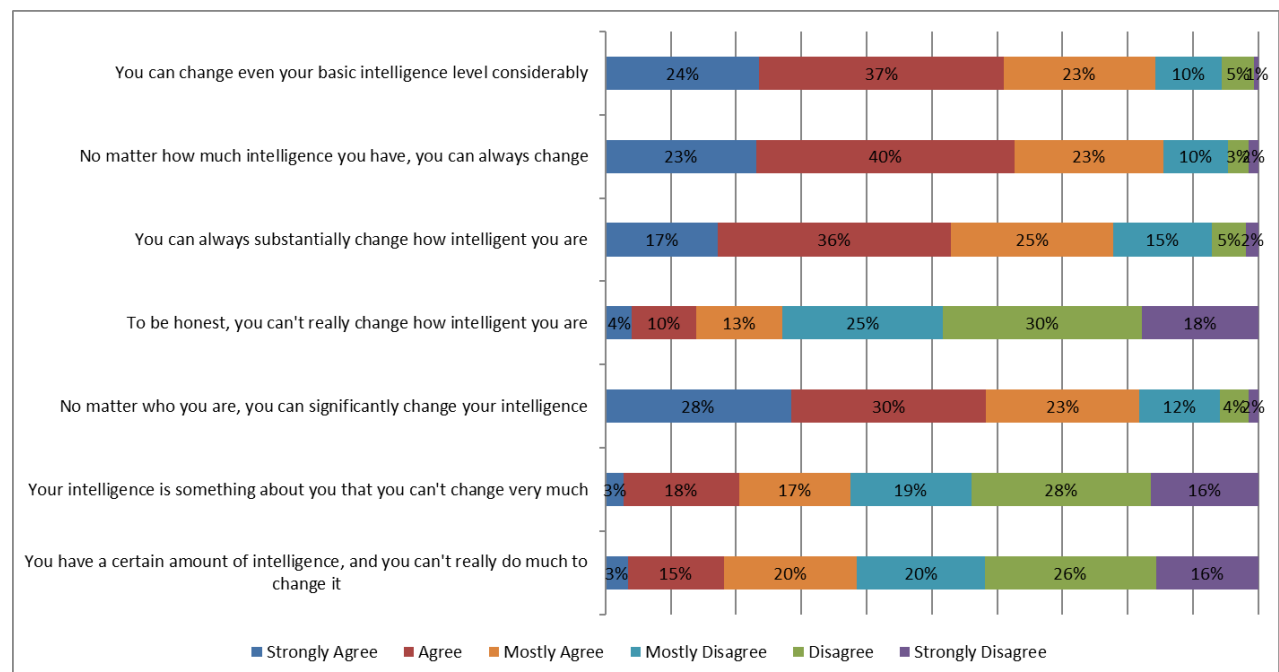
(please tick one box for each line)

Reflecting on your studies overall (post module) to what extent do you believe that the module has assisted with the following intellectual activities					
Answer Options	Very Much	Quite a bit	Some	Very Little	Response Count
MEMORISING facts, ideas or methods from our subjects and reading	37	102	133	53	325
ANALYSING the basic elements of an idea, experience or theory, such as examining a particular case or situation in depth and consider its components	49	125	113	38	325
ORGANISING and SYNTHESISING ideas, information or experiences into new, more complex interpretations and relationships	50	121	127	27	325
MAKING JUDGEMENTS about the value of information, arguments or methods, such as examining how others gather and interpret data and assessing the soundness of their conclusions	51	129	109	36	325
APPLYING theories and concepts to practical problems or in new situations	57	111	118	39	325
answered question					325
skipped question					
average	49	118	120	39	



Question 15 - Please indicate the extent to which you agree or disagree with each of the following statements? (please tick one box for each line)

Place indicate the extent to which you agree or disagree with each of the following statements							
Answer Options	Strongly Agree	Agree	Mostly Agree	Mostly Disagree	Disagree	Strongly Disagree	Response Count
You have a certain amount of intelligence, and you can't	11	48	66	64	85	51	325
Your intelligence is something about you that you can't	9	57	55	60	89	53	323
No matter who you are, you can significantly change your	92	97	76	40	14	5	324
To be honest, you can't really change how intelligent you	13	32	43	80	99	58	325
You can always substantially change how intelligent you	56	116	81	49	17	6	325
No matter how much intelligence you have, you can	75	128	74	32	10	5	324
You can change even your basic intelligence level	76	121	75	33	16	2	323
answered question							323
skipped question							2



Question 16 - What are the BEST ASPECTS of the module (i.e. elements you enjoyed / found interesting / useful in subsequent module)?

ID	Gender	Age	Which HEI do you attend?	Year of Study	What are the BEST ASPECTS of the module (i.e. elements you enjoyed / found interesting / useful in subsequent module(s))
4251485937	Female	19-21	Site 2	Third Year	A lot of new information regarding technology and social media. Extremely entertaining
4294770104	Male	22-25	Site 1	Third Year	a nice bit of sleep in the evening to rest you for driving
3927672765	Female	22-25	Site 1	Third Year	Ability to reference assignments/ essays correctly
4253881369	Male	19-21	Site 2	Second Year	All subjects and the lecturers are fantastic
4265035412	Male	26	Site 2	Second Year	Allowing student to settle into college life, the new challenges that appear. Useful in many ways I found at the end of the module it helped focus myself to study and work harder
4295769426	Male	26	Site 1	Third Year	As a mature student it was a considerable help returning to studying
3926991307	Male	19-21	Site 1	Third Year	Atmosphere in class
4251418469	Female	19-21	Site 2	Third Year	Attendance was marked Learned to reference properly Learning how to use moodle
4269916561	Male	19-21	Site 2	Third Year	Being part of a group and just having fun
4280225441	Female	22-25	Site 1	Fourth Year	Being shown resources
4294845301	Male	19-21	Site 1	Third Year	Bitta farming in Mountbellew
3926815983	Male	19-21	Site 1	Third Year	Blank
3926998839	Male	22-25	Site 1	Third Year	Business plan Poster design
3926828266	Male	19-21	Site 1	Third Year	Business Plan Marketing Plan
3926802481	Male	19-21	Site 1	Third Year	Business Plan Marketing Plan
3927051591	Male	19-21	Site 1	Third Year	By doing this Module it helped me plan assignments and helped me understand them better
4294869955	Male	26	Site 1	Third Year	cannot remember
4251577421	Male	19-21	Site 2	Third Year	CAs

4265039640	Male	19-21	Site 2	Second Year	Class Discussion
4269860418	Male	19-21	Site 2	Second Year	class discussion group work presentations
4269946779	Male	19-21	Site 2	Third Year	Communicating with other classmates in the class and outside of the class
3927511192	Male	19-21	Site 1	Third Year	Communication Leadership Computer skills
4265113398	Male	22-25	Site 2	Third Year	Communication within a group Oral presentation using powerpoint
4288856241	Female	19-21	Site 2	Third Year	confidence from doing presentations
4288877111	Male	19-21	Site 2	Third Year	confidence from group presentations
4271566099	Female	19-21	Site 1	Third Year	confidence you get from presentations
4295783787	Male	26	Site 1	Third Year	critical thinking different ways to look at things. Found this the most interesting puts everything into different perspectives, look, listen but most of all take your time to make a judgement
4294621280	Female	26	Site 2	Second Year	Development of skills and abilities to do a presentation
4295502231	Male	19-21	Site 1	Third Year	Didn't like it
4251608878	Female	19-21	Site 2	Fourth Year	Discussion about different opinions in class
4269929951	Female	19-21	Site 2	Third Year	Doing group presentations
4294721682	Male	19-21	Site 1	Third Year	Doing presentations working in teams class discussion
3927655336	Female	19-21	Site 1	Third Year	Doing Presentations and learning how to write college papers e.g. plagiarism
4291763244	Male	19-21	Site 2	Third Year	doing presentations gives you confidence
4253898299	Male	19-21	Site 2	Second Year	Doing presentations, so you get a feel for them
3926852537	Male	19-21	Site 1	Third Year	Doing up mu own personal profile, as it included a CV that I used for applying for jobs
4251416529	Female	19-21	Site 2	Third Year	Eases you into third level
4280210189	Male	19-21	Site 1	Third Year	Easy Laid back, less serious than other subjects Learning how to reference and use moodle etc
3926976503	Male	19-21	Site 1	Third Year	Easy Module Good class to open your eyes to college life
3926884311	Male	22-25	Site 1	Third Year	Easy to learn and understand

4253837920	Female	19-21	Site 2	Second Year	Enjoyed the class discussion
3927452743	Male	19-21	Site 1	Third Year	Everything
4269867336	Female	19-21	Site 2	Second Year	Found learning about how to do projects, assignments, layouts very helpful and general information about how things work in the college
4295000328	Male	19-21	Site 1	Third Year	Found the module of no relevance at all
4269951468	Female	19-21	Site 2	Third Year	Funny lecturer
4251614946	Male	19-21	Site 2	Fourth Year	Gave me the chance to present in front of the class and get comfortable with it
4271341173	Male	22-25	Site 1	Third Year	Getting to experience doing a presentation with this group of people for the first time
4271603906	Female	22-25	Site 1	Third Year	getting to know classmates as class groups were small It was easier than other modules and therefore felt like a break
4280207774	Male	22-25	Site 1	Third Year	Getting to know other classmates Learning what to expect from other modules especially project workloads Learning about Plagiarism and referencing and how to do a project
4296987080	Female	19-21	Site 1	Third Year	Getting to know other students in your class Confidence you get from doing presentations
4296972099	Female	19-21	Site 1	Third Year	Getting to know the people in the class
4265060604	Male	19-21	Site 2	Third Year	Getting together to do group projects
4294729816	Male	19-21	Site 1	Third Year	good to learn to do presentations
3922230638	Female	26	Site 1	Second Year	Got to know our way around the library. Learning to learn organised guided tours and talks on where to find books and the best material for our projects.
3927020680	Female	19-21	Site 1	First Year	group activities
4250582076	Male	19-21	Site 2	Fourth Year	Group discussions Getting to know people understanding independent learning
4270098589	Male	19-21	Site 1	Second Year	Group discussions, simulations, presentations work sheets interactive open class
4288865736	Male	19-21	Site 2	Third Year	group presentations

4265116011	Female	19-21	Site 2	Third Year	group presentations group work
4265057831	Female	19-21	Site 2	Third Year	group presentations as it involves everyone and builds confidence
3927037680	Female	19-21	Site 1	First Year	Group Projects
4265143761	Female	19-21	Site 2	Fourth Year	group projects
4307780816	Female	22-25	Site 1	Second Year	Group projects enable me to get to know more people in class, It was also interesting to do a group assessment because I am a bit of a control freak and didn't think I would be comfortable with the task - but I was
4265152834	Male	22-25	Site 2	Fourth Year	group talks
3922662352	Female	19-21	Site 1	First Year	Group Work
4285597619	Male	19-21	Site 1	Fourth Year	Group work
4280233239	Male	19-21	Site 1	Fourth Year	Group work
4295705643	Male	22-25	Site 1	Third Year	Group work
4295026068	Male	19-21	Site 1	Third Year	Group Work
4280216711	Male	16-18	Site 1	Fourth Year	Group work General Learning about everything
4307770171	Male	19-21	Site 1	Second Year	Group work and Presentations
4307795546	Male	19-21	Site 1	Second Year	Group work and team building
4307744788	Female	22-25	Site 1	Second Year	Groupwork
4269856714	Male	16-18	Site 2	Second Year	groupwork peer mentors
3926812777	Male	19-21	Site 1	First Year	group work
4295041983	Male	19-21	Site 1	Third Year	Hands on projects that require group work, chance to mix with other students
4251408698	Male	19-21	Site 2	Third Year	Harvard reference style
4251489024	Male	19-21	Site 2	Third Year	Harvard Referencing style Turn it in plagiarism
4265198849	Male	22-25	Site 2	Third Year	Having a lecturer you can go to for help adjusting into college life. Practising skills you will need in college and life working in groups

4291753556	Male	22-25	Site 2	Third Year	Having support & guidance
3927063349	Male	19-21	Site 1	Third Year	Help with assignments, study and assignments due dates calender
3927354385	Male	19-21	Site 1	Third Year	Helped me how to access assignments Helped me to see the importance in time management
4280227694	Female	22-25	Site 1	Fourth Year	Helped me reference properly Helped with note taking in lectures Helped with my time management skills
3926968667	Male	19-21	Site 1	Third Year	Helped me understand to prepare better for assignments and tests
3927029543	Male	19-21	Site 1	Third Year	Helped me when studying and completing group and individual assignments
4280223057	Female	19-21	Site 1	Fourth Year	Helped with learning type of learning skills everyone has Finding how the library works and how to fine books etc
3922633230	Male	26	Site 1	Second Year	Helped with project class
4294864223	Male	19-21	Site 1	Third Year	Helping with transition from secondary to third level
4250534258	Female	19-21	Site 2	Fourth Year	Helps you get to terms with a college and whats expected of us
4296980648	Male	19-21	Site 1	Third Year	Highlighted how to reference Different Learning styles
4251594922	Male	22-25	Site 2	Fourth Year	How to study effectively Presentations
4280230612	Female	22-25	Site 1	Fourth Year	I did not enjoy the module. I was marked very harshly in the end
4270934091	Male	26	Site 1	Second Year	I did not personally like the module
4270088272	Male	26	Site 1	Second Year	I enjoyed all and IT subjects
3926842495	Male	19-21	Site 1	First Year	I enjoyed the team work activity because I found it very interesting and it help me learn more about my fellow classmates.
4253906261	Female	22-25	Site 2	Second Year	I enjoyed working in a group and making presentations. I improved my communication skills
4307787067	Female	26	Site 1	Second Year	I enjoyed working in groups solving problems and practising presentation skills
4294799870	Male	19-21	Site 1	Third Year	I found helpful the information given on making presentations. It helped me to better prepare for future presentations

4272598094	Female	19-21	Site 1	Third Year	I found is useful to work in groups you meet new people and learned different ways of studying
4265122445	Male	19-21	Site 2	Third Year	I found it extremely beneficial working as part of a team to present a project, it prepared us for the projects which presented themselves to us in the future. Helped us prepare for the difficult CA's by teaching us techniques for time management and study techniques
3922487135	Female	16-18	Site 1	First Year	I found the class very interesting. It was very engaging and everyone was included. I felt the class discussions were helpful and a stress reliever and everyone was able to input their own opinion.
4307752995	Female	16-18	Site 1	Second Year	I found the lectures on plagiarism helpful as I wouldn't had any prior understanding of it. It was very useful learning how not to plagiarise. The report we also did was helpful as it gave us the knowledge on how to layout one. The presentation was also helpful as it helps to build confidence
3922587404	Male	16-18	Site 1	First Year	I found the module interesting to study. Improved my skills
4265043713	Male	22-25	Site 2	Second Year	I found the written aspect interesting
4270712064	Female	26	Site 1	Second Year	I found time management very useful I found the learning very useful
4251574889	Male	19-21	Site 2	Third Year	I just thought it was easy marks
4251563286	Male	19-21	Site 2	Third Year	I think the best was how to construct reports/reference correctly. Lots of little tips on how to make college easier with regard to presentations/reports.
4295010737	Male	19-21	Site 1	Third Year	improved my thinking improved my analytical skills improved my time management
4265128786	Male	26	Site 2	Third Year	In front of class presentations
3926891780	Male	19-21	Site 1	Third Year	It introduced me to ways of college from secondary school
3926861727	Male	19-21	Site 1	First Year	It is easy to understand and learn
3926844238	Male	22-25	Site 1	Third Year	It is thought provoking
4271626145	Female	26	Site 1	Third Year	It was a break more intense subjects

3927425501	Female	19-21	Site 1	Third Year	It was a very practical subject that involved a lot of C.A. I found the portfolio very useful
4265063162	Female	26	Site 2	Third Year	IT was fun
4280214760	Female	26	Site 1	Fourth Year	IT was helpful when I started college with different information about the library, referencing and plagiarism etc
3922612899	Male	19-21	Site 1	Second Year	It was practical and helped my experience when it came to working in a team
3922462826	Female	26	Site 1	Second Year	It was useful for the practical info we received in relation to using moodle, getting to know the college, how to complete assignments and what was required of you.
4265163803	Male	19-21	Site 2	Fourth Year	IT was very open, presentation skill and academic writing were improved
4296973800	Female	22-25	Site 1	Third Year	knowing class mates
4250528403	Male	22-25	Site 2	Fourth Year	Learn online aspects
3922566143	Male	22-25	Site 1	Second Year	Learned to analyse all aspects of life and learned to look at a situation from all parties perspective.
3927636257	Female	19-21	Site 1	Third Year	Learning about different learning styles each person has
3922205997	Female	19-21	Site 1	First Year	Learning about my own learning style and how I study best. Learning what study methods work best for me.
4307748706	Female	19-21	Site 1	Second Year	Learning about plagiarism and how a project was to be presented and learning all the functions of moodle
3922714358	Male	16-18	Site 1	First Year	Learning about team work, time management, communication skills and meeting new people.
4250588146	Female	19-21	Site 2	Fourth Year	Learning how to a good presentation and to write a good report
4250530863	Male	22-25	Site 2	Fourth Year	Learning how to approach CA tests
4251569233	Female	19-21	Site 2	Third Year	Learning how to fit in and adapt to college life
4294713389	Male	19-21	Site 1	Third Year	Learning how to make and do a presentation to the class was very helpful and I may need this skill in the future
3927692177	Male	19-21	Site 1	Third Year	learning how to reference and getting the style guide were the two best things

4265045944	Male	22-25	Site 2	Second Year	Learning how to use moodle goal setting different learning styles
4251491341	Female	22-25	Site 2	Third Year	Learning how to write reports with style guides learning about plagiarism learning how to reference
3927247348	Female	19-21	Site 1	Third Year	Learning new skills
4250585416	Male	19-21	Site 2	Fourth Year	Learning new ways to learn
3927488840	Male	19-21	Site 1	Third Year	Learning skills Communication skills
3922743951	Male	19-21	Site 1	First Year	Learning styles
4270696984	Female	19-21	Site 1	Second Year	Learning Styles
4250539859	Female	19-21	Site 2	Fourth Year	learning the presentation skills and how to reference properly
3927272288	Male	19-21	Site 1	Third Year	Learning the subjects
4296989451	Female	19-21	Site 1	Third Year	Learning to use the college online websites such as the library
4253846616	Male	19-21	Site 2	Second Year	Learning to work in a group
4294707752	Male	22-25	Site 1	Third Year	learning to work in teams makes you a better problem solving person
3927081497	Male	22-25	Site 1	Third Year	Learning types
4272594446	Female	26	Site 1	Third Year	Learning what kind of learners we were and how to use that information to benefit use in college
3922249593	Female	22-25	Site 1	First Year	Leaving styles
4288860475	Male	19-21	Site 2	Third Year	made move to college easier, confidence gained from presentations
3926981235	Male	19-21	Site 1	First Year	meeting new people learning new skills, communication etc
4285612002	Male	22-25	Site 1	Fourth Year	More relaxed environment
4295512528	Male	19-21	Site 1	Third Year	N/A
4295033183	Male	19-21	Site 1	Third Year	N/A
3927689199	Male	22-25	Site 1	Third Year	N/A
3927639868	Female	19-21	Site 1	Third Year	N/A
3927407995	Male	19-21	Site 1	Third Year	N/A

3927335681	Male	19-21	Site 1	Third Year	N/A
3927322217	Male	19-21	Site 1	Third Year	N/A
3927070969	Male	19-21	Site 1	Third Year	N/A
3927013330	Male	19-21	Site 1	Third Year	No
3922588243	Female	22-25	Site 1	Second Year	No answer
4269959832	Female	19-21	Site 2	Third Year	no studying had to be done for this module working in groups
4270105855	Female	22-25	Site 1	Second Year	none
4270082360	Female	19-21	Site 1	Second Year	none
4269938175	Male	26	Site 2	Second Year	None
4295018279	Male	26	Site 1	Third Year	None
4294736758	Female	19-21	Site 1	Third Year	none
4271538676	Male	19-21	Site 1	Third Year	None
4265105684	Female	26	Site 2	Third Year	None
4296978573	Male	19-21	Site 1	Third Year	Nothing it was pointless
3922252852	Female	26	Site 1	Second Year	On Induction, the guided tours proved to be beneficial eg. finding books in the library
4253871618	Male	19-21	Site 2	Second Year	Plagiarism Report writing use of resources in the library and information technology
4250577774	Female	19-21	Site 2	Fourth Year	plagiarsim, report writing, referencing,presentations, mixing with classmates
4294811124	Male	19-21	Site 1	Third Year	portfolio skills interview skills
4291759237	Male	19-21	Site 2	Third Year	Preparing for a presentation
4253826294	Male	19-21	Site 2	Fourth Year	Presentation practice and how to reference material properly
4251571714	Male	22-25	Site 2	Third Year	Presentation Skills
4291766808	Male	19-21	Site 2	Third Year	presentation skills/practice referencing
4265155027	Female	22-25	Site 2	Fourth Year	Presentations

4251602364	Female	19-21	Site 2	Fourth Year	presentations group work
4271549675	Female	19-21	Site 1	Third Year	Presentations Group work
4251581504	Male	22-25	Site 2	Third Year	presentations group work learning about academic development
4265118129	Male	26	Site 2	Third Year	Presentations group work online material
4272588200	Male	22-25	Site 1	Third Year	Presentations Main gain from it would be to meet the class Group work (Should be just in class work though)
4269863957	Male	19-21	Site 2	Second Year	Presentations Researching for reports peer mentoring
4272608301	Male	19-21	Site 1	Third Year	Presentations Videos
4272604246	Male	19-21	Site 1	Third Year	presentations videos icebreakers you got to know the class at the start of 1st year
4288847506	Male	22-25	Site 2	Second Year	Presentations and Group work
4272584658	Female	19-21	Site 1	Third Year	Presentations helped my presenting skills
4265192786	Male	19-21	Site 2	Third Year	Presentations less pressure because not as much marks going for it and also good practice
4272615778	Female	26	Site 1	Third Year	presentations -PowerPoint's in front of class gave me more confidence
4272579710	Female	22-25	Site 1	Third Year	Presentations skills and learning what methods of learning and studying suits each person
4272619655	Female	19-21	Site 1	Third Year	Presentations while not exactly enjoyable I did find them rather useful Plagiarism - reference/bibliography came in handy in other modules
4253889683	Male	19-21	Site 2	Second Year	project
4294857270	Male	19-21	Site 1	Third Year	public presentations discussions discovery of new ways to learn
4294881249	Male	26	Site 1	Third Year	putting together presentations and time management
4294758483	Male	22-25	Site 1	Third Year	range of learning skills
4269871804	Male	26	Site 2	Second Year	Referencing Study plans goal setting
4295488375	Female	19-21	Site 1	Third Year	Referencing Submission of assignments rather than exams
4280206085	Male	26	Site 1	Third Year	Report writing Plagiarism Referencing
4271577992	Male	26	Site 1	Third Year	report writing presentations

4307774758	Male	26	Site 1	Second Year	Reports and presentations
4269888314	Female	22-25	Site 2	Third Year	Settings goals Getting to work as part of a team
4265048207	Male	22-25	Site 2	Fourth Year	Shown how to prepare projects Shown how to use online resources
3922507944	Male	26	Site 1	Second Year	Some lecturers were better than others. However lecturer we had encouraged to way flow information. He used his life experience compared with his own extensive business life/ work experience which made it a great module.
4294818569	Female	22-25	Site 1	Third Year	Some of the class discussion on relative topics
4269955721	Female	19-21	Site 2	Third Year	Study planning
3922270832	Male	16-18	Site 1	First Year	study skill
3922304604	Female	16-18	Site 1	First Year	study skills and methods on how to study. Time management area was good as it made you log your week and keeping to your study plan like exercise that you may have set yourself.
3922273673	Female	26	Site 1	Second Year	Study Techniques
3927307699	Male	19-21	Site 1	Third Year	Study Techniques and prep Interaction/class discussion relevant assignments
4251566372	Female	19-21	Site 2	Third Year	Style guide was quite useful
3927532924	Female	19-21	Site 1	Third Year	Taking part in group project Experience working with others
3922514698	Female	19-21	Site 1	First Year	Team work
4295396352	Male	19-21	Site 1	Third Year	Team work
3927384705	Male	22-25	Site 1	Third Year	Team work
4251496453	Male	19-21	Site 2	Third Year	Team work communication
4265041608	Male	19-21	Site 2	Second Year	Teamwork
4251493439	Male	22-25	Site 2	Third Year	Teamwork presentations, learning to do them early is important Answers one opinion based and allow for different points of view
3922615466	Male	19-21	Site 1	First Year	Teamwork module in which there was a presentation involved

3922555589	Male	19-21	Site 1	First Year	Teamwork working in groups
4295798100	Male	19-21	Site 1	Third Year	Teamwork, creativity etc
3926802502	Male	19-21	Site 1	First Year	The analytical element of research
3922284659	Male	26	Site 1	Second Year	The aspects that prepared us for second year, some lecturer expect your work to be how to present work to lecturer. Without this module a person would progress to second year and make lots of mistakes. The benefits to student to undertake this module.
4251483440	Female	19-21	Site 2	Third Year	The basics Plagiarism explained All the stuff we were expected to know but didn't
4270093922	Female	19-21	Site 1	Second Year	The best thing about this module was a lot of team work and projects which made it easier to connect with other people
4269925924	Male	19-21	Site 2	Third Year	the class talk and work we done. The interaction with the class as we done class work was fun
4269933602	Female	19-21	Site 2	Third Year	The communication with other class members Learning how to research Learning how to do presentations and speak publicly The importance of feedback The importance of being involved in discussions
3922635688	Female	19-21	Site 1	First Year	The different study methods we were told for exams, CA's etc. learning how to research info and to do assignment.
4265156962	Male	26	Site 2	Fourth Year	The explanation of appropriate referencing was helpful. It was a good way to get to know classmates as a results of the laidback environment.
3927283635	Male	22-25	Site 1	Third Year	The field trip
3927260906	Male	19-21	Site 1	Third Year	The field trip to the mart
4265108338	Female	19-21	Site 2	Third Year	The group presentations I found the best part of the module. It helped me to understand how to work most efficiently with other people
3922691988	Female	19-21	Site 1	First Year	The group work assessment as i got to know others
4251410867	Male	19-21	Site 2	Third Year	the help I got
4265032283	Female	19-21	Site 2	Second Year	The interacting with the class feeling like you can speak your mind, you don't get that feeling in all classes

4295548839	Male	22-25	Site 1	Third Year	The lecturer delivering the module
4253915297	Male	19-21	Site 2	Second Year	the lecturer often brought the class into the conversation by picking random different students to talk or answer the given questions
4265050770	Female	22-25	Site 2	Third Year	The lecturer was alive which in return made the module interesting
4265148578	Female	26	Site 2	Fourth Year	the lecturer was approachable learned what to expect and the standard of learning required
4265145684	Female	26	Site 2	Fourth Year	The lecturer was approachable and doing presentations
4251498435	Male	19-21	Site 2	Third Year	The main things I found useful in this module was the tutorials on how to use Moodle, how to reference properly and the practice we at doing presentations
3927377922	Male	19-21	Site 1	Third Year	The Module was communicated across well and it was easy to understand what the main elements of module were
4272611129	Female	22-25	Site 1	Third Year	The most important thin I learnt in this module what how to reference. As I did not enter college straight from secondary school other aspects were not relevant
4269875645	Female	19-21	Site 2	Second Year	The most useful aspects were learning how to reference/what sources to use/how to layout projects Another great aspects was learning more about myself and feeling more confident doing presentations
4265203917	Male	22-25	Site 2	Third Year	The organisation aspect of the module, from gathering information to putting the results in written form was a great help
4294612118	Female	19-21	Site 2	Second Year	The presentation can help people to gain the needed confidence to stand up in front of people. The study tips were useful and helpful, included essentials guidelines need to succeed in following years
4265195756	Male	19-21	Site 2	Third Year	The presenting topic discussion
4265037613	Female	26	Site 2	Second Year	The style guide was most useful
4269920439	Female	19-21	Site 2	Third Year	the teacher we have for this module made it interesting. He made it seem less of a class and more of a class that you wanted to go to with your friend

4251412883	Female	19-21	Site 2	Third Year	the writing guide introduction to moodle presentation skills attendance was part of the final grade lecturer really knew what he was doing made the transition from second to third level easier
3922286286	Male	19-21	Site 1	First Year	Time management
4294851581	Female	19-21	Site 1	Third Year	time management skills Studying skills
4265150882	Female	26	Site 2	Fourth Year	transferrable skills project
4280219743	Female	19-21	Site 1	Fourth Year	Useful aspect was that the module gave you free credits
4295080984	Female	19-21	Site 1	Third Year	Useful for Moodle, easy to know how to submit project.
4269881745	Male	19-21	Site 2	Third Year	Useful in subsequent modules
4295051191	Male	19-21	Site 1	Third Year	Very few assignments
4265130857	Female	19-21	Site 2	Third Year	Was good practice for doing and preparing for presentations
3926984231	Male	19-21	Site 1	Third Year	Ways of learning material
3926831920	Male	19-21	Site 1	First Year	working as a team
3927656868	Male	22-25	Site 1	Third Year	Working as part of a group, helps adults from leaving cert. level of working by yourself to working in groups. overall helps for future work and studies.
3926853911	Female	19-21	Site 1	First Year	working as part of a team
3922548498	Male	26	Site 1	Second Year	Working in a group and achieving in writing a good piece of literature that was researched well as well as using critical thinking in the writing of the piece.
4265054830	Female	19-21	Site 2	Third Year	Working in a group and doing presentations for the first time prepared me for what to do and what not to do in the future for different presentations
4265160722	Female	19-21	Site 2	Fourth Year	Working in groups class presentations
4250590777	Male	19-21	Site 2	Fourth Year	working in groups learning about the library moodle
3927713464	Male	19-21	Site 1	Third Year	Working in groups Learning how to use Moodle how to prepare for assignment

3926914126	Male	16-18	Site 1	First Year	Working in groups meeting new people
3926904812	Male	19-21	Site 1	First Year	working in groups and getting good plans
4265103417	Female	19-21	Site 2	Third Year	Working in groups and learning how to do presentations in front of class members
4269963773	Female	19-21	Site 2	Third Year	working in groups and presentations
4269943577	Male	22-25	Site 2	Third Year	working in groups expanded my knowledge and communication skills
4307762786	Male	19-21	Site 1	Second Year	working in groups was very helpful. learning different types of brainstorming
4307791652	Male	22-25	Site 1	Second Year	working in teams and doing a presentation I found this useful to me
4294763976	Male	19-21	Site 1	Third Year	working on a CV and building up a portfolio on everything that you have achieved
3926822039	Male	19-21	Site 1	First Year	Working on group work Time management
3922533005	Male	16-18	Site 1	First Year	working together as a team
4294875841	Male	26	Site 1	Third Year	Working with other people
4269885282	Female	19-21	Site 2	Third Year	working with other students class discussions
3926837715	Male	19-21	Site 1	Third Year	Working with others
4265126413	Male	19-21	Site 2	Third Year	working with others learning how to do presentations learning how to plan out our study/work
4251559763	Female	19-21	Site 2	Third Year	writing techniques when using Microsoft office plagiarism presentation skills
A total of 281 responses were received for this questions					

Question 17 - Any aspects of the module you think could be improved / amended to enhance the module?

ID	Gender	Age	Which HEI do you attend ?	Year of Study	Any aspects of the module you think could be improved / amended to enhance the module
4272604246	Male	19-21	Site 1	Third Year	2 hour session was very boring too much theory hard to focus
4265054830	Female	19-21	Site 2	Third Year	A little more group activities to make the module a bit more interesting as well as challenging, including mock presentations for people like me who wouldn't be confident in doing them
4271341173	Male	22-25	Site 1	Third Year	A lot of the content and workload I felt was irrelevant and irksome. The exercises and assignments could be co-ordinated in a more light-hearted and stress free way, as general the module felt like a waste of time
3927713464	Male	19-21	Site 1	Third Year	A project/CA to do to increase class participation and attendance.
4265113398	Male	22-25	Site 2	Third Year	Apply it to more practical project i.e. use the teaching methods throughout the core modules. Feels like a waste of time otherwise
4265156962	Male	26	Site 2	Fourth Year	as a mature student I did not find the module much use as it seemed to be aimed at school leavers
3922507944	Male	26	Site 1	Second Year	As I mentioned previously our lecturer had the talk but he could also "walk the walk". It was a great foundation for not alone going back to college but also0 for back to work and indeed life in general.
4265148578	Female	26	Site 2	Fourth Year	As it was the first there was very little information on the module
3922533005	Male	16-18	Site 1	First Year	Better teaching methods
4280207774	Male	22-25	Site 1	Third Year	Changing the name to anything except learning to Learn Maybe College survival skills
4295041983	Male	19-21	Site 1	Third Year	Class trip to somewhere you could base a project on.
4294857270	Male	19-21	Site 1	Third Year	could be examined better wait until students are older and more mature
4251614946	Male	19-21	Site 2	Fourth Year	Could help students with more of an introduction to their course i.e. what its all about and where it can lead you to.

4295000328	Male	19-21	Site 1	Third Year	Did not enjoy very much at all. Found it pointless to do in 1st year. Didn't interest us. Would possible be better in 3rd year
3926802481	Male	19-21	Site 1	Third Year	Different way to learn
3926828266	Male	19-21	Site 1	Third Year	Different ways of learning the subject
4295502231	Male	19-21	Site 1	Third Year	Do more presentations sets you up for later projects in college
4251566372	Female	19-21	Site 2	Third Year	Don't make people do live tweeting Don't make people join twitter if they don't want to Tell everybody to use Harvard Referencing instead of assuming they already know who to use it.
4272619655	Female	19-21	Site 1	Third Year	Duration of the module could be shortened down, a lot of repetition of information
3927335681	Male	19-21	Site 1	Third Year	Emails for lecturers Easier to use
4294818569	Female	22-25	Site 1	Third Year	essay writing, don't use topics of no interest to the students
4251410867	Male	19-21	Site 2	Third Year	everything is fine
4295798100	Male	19-21	Site 1	Third Year	exam preparation
4272588200	Male	22-25	Site 1	Third Year	Focus more on working in class instead of group assignments Our course spent too much time doing silly assignments when we had actual work to do. Making a learning tool for others was not a learning experience. We needed more time to prepare for exams in other subjects. Subjects should not be a full module. 1 hour a week, not part of a grade. Let it be a choice. Give students the option because many just don't need it.
4269955721	Female	19-21	Site 2	Third Year	Focusing on future aspects of a student Life after college
4269938175	Male	26	Site 2	Second Year	For the mature student L to L is not too much of an advantage as a lot of the time management skills and teamwork skills have already been developed
4251563286	Male	19-21	Site 2	Third Year	For what it is, I think it serves its purpose
3922462826	Female	26	Site 1	Second Year	From a mature student perspective, I don't have any suggestion for improvement.

4265126413	Male	19-21	Site 2	Third Year	Go into more detail on planning out your work/doing presentations Discuss problems with the class/groups and try to solve them
3926844238	Male	22-25	Site 1	Third Year	Group assignments: Individuals should be randomly selected for group assignments
4269920439	Female	19-21	Site 2	Third Year	Group presentation, people struggle with that. You are just told you have to do it. Everybody watches you and has to write about your presentations, makes you more nervous
3922588243	Female	22-25	Site 1	Second Year	Group project - No preparation, no help to write it, no guidelines. We were unclear what to do, and in the end MSQ exam was a disaster for all group. We were unprepared for majority of questions. Found it a waste of time
4250528403	Male	22-25	Site 2	Fourth Year	Group Work
4251485937	Female	19-21	Site 2	Third Year	Group work communication skills including more practical work
3927425501	Female	19-21	Site 1	Third Year	Have a small C.A. or an assessment every week instead of a big test or project of the end of the semester
3922633230	Male	26	Site 1	Second Year	Have each class help you with a specific subject? module.
4269963773	Female	19-21	Site 2	Third Year	Helping more with stress management
4269863957	Male	19-21	Site 2	Second Year	How to adjust to the social life of college
4295051191	Male	19-21	Site 1	Third Year	I did not find the module very useful at all. Time could have been used for other lectures or for completing other college work. The class felt very tedious and childish
4265118129	Male	26	Site 2	Third Year	I found it quite boring at times and couldn't see the benefits until 2nd year
4294799870	Male	19-21	Site 1	Third Year	I found that we should have been educated better on the style guide and how to reference for assignment. We were given no guidance on how to reference at all and had to find this out ourselves over time. I also feel we have been educated better with regard to research skills i.e. how to use google scholar and also using the library search bar to look for helpful journal articles & books. Overall looking back I feel the

					module was a missed opportunity and could have been delivered better.
4271626145	Female	26	Site 1	Third Year	I sat English in 1st year and found it more beneficial than learning to learn from an academic writing point of view. A mix of the two would be more beneficial
4251608878	Female	19-21	Site 2	Fourth Year	I think implementing more group work
4295080984	Female	19-21	Site 1	Third Year	I think learning to learn didn't really contribute much to my course however I found that it helped with submitting projects but that was all
4280230612	Female	22-25	Site 1	Fourth Year	I think the marking scheme could be improved and not be so harsh on 1st years
4272611129	Female	22-25	Site 1	Third Year	I think the module should be aimed more at college aspect rather than the transition from secondary school. I felt that the time I spent on learning to learn tasks I could have spent studying for my accounting subjects
3922714358	Male	16-18	Site 1	First Year	I think the plagiarism was hard to understand
4307762786	Male	19-21	Site 1	Second Year	I would have a higher element of the overall marks for the group assessment as it would make all the student in the group work harder
4294713389	Male	19-21	Site 1	Third Year	If we were shown how to reference in the way that college wants us to. This would be very useful in the rest of our college lives
4251498435	Male	19-21	Site 2	Third Year	It can't be improved too much. For what it is, it serves its purpose
3927354385	Male	19-21	Site 1	Third Year	It should not be marked/ grades as 100% attendance More marks should be given to attendance
4294736758	Female	19-21	Site 1	Third Year	IT skills essay writing referencing
4272584658	Female	19-21	Site 1	Third Year	It was slightly boring and very demanding when the accounting subjects required more work at the same time
4307795546	Male	19-21	Site 1	Second Year	Its perfect already
3922514698	Female	19-21	Site 1	First Year	language and french
4296982798	Female	19-21	Site 1	Third Year	Layout of the course was poor

3927639868	Female	19-21	Site 1	Third Year	Learning more about presentations
3922743951	Male	19-21	Site 1	First Year	Lecturer wasn't very helpful
4250577774	Female	19-21	Site 2	Fourth Year	lectures chooses groups as opposed to students. This allows students to learn to work outside their comfort zone and not always stick to working with the same people. More class discussion
4280210189	Male	19-21	Site 1	Third Year	Less hours you could do the course in a week & focus more on harder subject & certain tutorials
4307744788	Female	22-25	Site 1	Second Year	Less stressful work
3927307699	Male	19-21	Site 1	Third Year	Less tests
4265057831	Female	19-21	Site 2	Third Year	Little more help when it comes to research and also group to say exactly what has to be done
4269856714	Male	16-18	Site 2	Second Year	longer periods with mentors
4250590777	Male	19-21	Site 2	Fourth Year	make is more interesting
4251574889	Male	19-21	Site 2	Third Year	Make it more exciting somehow, it was very boring
4265060604	Male	19-21	Site 2	Third Year	make it more interesting in relation to the course you do
3922615466	Male	19-21	Site 1	First Year	Make it more up to date, focus more on business aspect e.g setting up an enterprise for example.
3926837715	Male	19-21	Site 1	Third Year	Making more presentations and presentation skills
4251569233	Female	19-21	Site 2	Third Year	Maybe don't have a presentation as it makes new students nervous
4272615778	Female	26	Site 1	Third Year	Maybe have less hours at the start of 1st year & include some hours in final year. It might help with writing reports etc
4265063162	Female	26	Site 2	Third Year	Maybe more hours introduced
3922230638	Female	26	Site 1	Second Year	Maybe more practical work. Problem solving. Computer work.
3922284659	Male	26	Site 1	Second Year	Maybe more written tasks and feedback given to student as written work is finished by lecturer where lots of marks are lost. Also, maybe mark students attend the maths/writing centre as part of this module. Maybe also have another module like learn to learn in second year.
4285597619	Male	19-21	Site 1	Fourth Year	Memory skills & practices

4269867336	Female	19-21	Site 2	Second Year	More about personal change to college and adapting to new work
4251489024	Male	19-21	Site 2	Third Year	more application of information technology
3927322217	Male	19-21	Site 1	Third Year	More C.A.
4294721682	Male	19-21	Site 1	Third Year	More class and group work more presentations as I felt they helped a lot
3926802502	Male	19-21	Site 1	First Year	more class interactive technology
4265192786	Male	19-21	Site 2	Third Year	More condensed information, slight information overload, a lot of pages at once
3927488840	Male	19-21	Site 1	Third Year	More diagrams
4265203917	Male	22-25	Site 2	Third Year	More emphasis on other cultural practices
4294811124	Male	19-21	Site 1	Third Year	more emphasis on practical parts of the module rather than essays
4251594922	Male	22-25	Site 2	Fourth Year	More emphasis on the importance of this module, as it was my 1st year it went over my head
4280216711	Male	16-18	Site 1	Fourth Year	More emphasis on writing skills Doing more presentations and reports plus some essay style questions
4294845301	Male	19-21	Site 1	Third Year	More farming in 3rd year
3927656868	Male	22-25	Site 1	Third Year	more focus on correct presentations skill and research methods along with correct referencing.
4251602364	Female	19-21	Site 2	Fourth Year	more focus on research/study resources
3927511192	Male	19-21	Site 1	Third Year	More graphs and Percentages
3922566143	Male	22-25	Site 1	Second Year	More group activity. Inter-class groups.
3922691988	Female	19-21	Site 1	First Year	More group work
4295033183	Male	19-21	Site 1	Third Year	More group work
3922612899	Male	19-21	Site 1	Second Year	More group work and also how best to study and get information online without being caught for plagiarism i.e. putting stuff in your own words.
4253837920	Female	19-21	Site 2	Second Year	More information on referencing as it is such a bog aspect of college
4294763976	Male	19-21	Site 1	Third Year	More information which is useful for daily living Developing IT skills

4265116011	Female	19-21	Site 2	Third Year	more interactions with other students
4250539859	Female	19-21	Site 2	Fourth Year	more interesting and fun. It was very boring class but you did learn
4296980648	Male	19-21	Site 1	Third Year	More IT could be used
4251418469	Female	19-21	Site 2	Third Year	More learning on your own More about using IT e.g. the library website, no one really knows who to use it.
4294770104	Male	22-25	Site 1	Third Year	more on referencing and how to lay out and put together assignments early on
4296989451	Female	19-21	Site 1	Third Year	More powerpoint presentations
3927081497	Male	22-25	Site 1	Third Year	More practical
3926904812	Male	19-21	Site 1	First Year	more practical instead of all writing
3922252852	Female	26	Site 1	Second Year	More practical work eg. more time spent on referencing, bibliography, as these necessary for any assignment that is subjected.
4265122445	Male	19-21	Site 2	Third Year	More practical work, instead of listening to lecturer read from his notes. Also I think it should have been encouraged for the students to try and find techniques they felt most difficult & could be improved. Best of luck with your research
3926842495	Male	19-21	Site 1	First Year	more presentation on summer exams would be quite beneficial perhaps a mock exam.
4269943577	Male	22-25	Site 2	Third Year	more presentation practice
4272598094	Female	19-21	Site 1	Third Year	more presentations
4295512528	Male	19-21	Site 1	Third Year	More presentations, better assignment
4291753556	Male	22-25	Site 2	Third Year	More project to get students involved, better teaching of study techniques
4296973800	Female	22-25	Site 1	Third Year	More reading
4280206085	Male	26	Site 1	Third Year	More real world interactions
4269871804	Male	26	Site 2	Second Year	more referencing more on sourcing references This is the groundwork on all future assignment/projects etc
4265163803	Male	19-21	Site 2	Fourth Year	More relevance try to link with other modules
4269916561	Male	19-21	Site 2	Third Year	More role play needed or get the class more involved

4250534258	Female	19-21	Site 2	Fourth Year	more stimulating
4269860418	Male	19-21	Site 2	Second Year	More study skills Study planner Theory
3926831920	Male	19-21	Site 1	First Year	more team work exercise
3922635688	Female	19-21	Site 1	First Year	more technology
4294875841	Male	26	Site 1	Third Year	More time on public speaking
4251493439	Male	22-25	Site 2	Third Year	more time spent focusing on time management and organisational skills
4307787067	Female	26	Site 1	Second Year	More time spent on academic writing especially for mature students or foreign students that have not been in the education system for a long period of time or if English is not their first language.
3927283635	Male	22-25	Site 1	Third Year	More work assignments
4307738696	Female	22-25	Site 1	Second Year	More work in groups, more group assessments and work with random people. It will make a huge difference when it comes to more serious projects. More presentations Module should be more practical rather than theoretical, students therefore don't take it seriously and mostly don't attend
3927272288	Male	19-21	Site 1	Third Year	More work to be done More continuous assignments for subjects Have no final exam at the end of the years
3927260906	Male	19-21	Site 1	Third Year	More work, more assignments and more time for lecturers
4271577992	Male	26	Site 1	Third Year	most other aspects of the module (not as state above in best aspects) were fairly useless to students of accounting
3922304604	Female	16-18	Site 1	First Year	much of the module was just theory so more interactive ares would be beneficial.
4280219743	Female	19-21	Site 1	Fourth Year	My experience with L2L wasn't good. Didn't get much knowledge from it as it is mostly common sense
4265043713	Male	22-25	Site 2	Second Year	n/a
3927689199	Male	22-25	Site 1	Third Year	N/A
3927532924	Female	19-21	Site 1	Third Year	N/A
3927407995	Male	19-21	Site 1	Third Year	N/A

3927377922	Male	19-21	Site 1	Third Year	N/A
3927247348	Female	19-21	Site 1	Third Year	N/A
3927070969	Male	19-21	Site 1	Third Year	N/A
3926891780	Male	19-21	Site 1	Third Year	N/A
3926884311	Male	22-25	Site 1	Third Year	N/A
4269929951	Female	19-21	Site 2	Third Year	N/A
4271603906	Female	22-25	Site 1	Third Year	Needs to be made more relevant to the course, seemed very general across all courses. Often felt like it was a waste of time as there was more important subjects
4251496453	Male	19-21	Site 2	Third Year	needs to be more practical
3926861727	Male	19-21	Site 1	First Year	No
4270934091	Male	26	Site 1	Second Year	No
4270093922	Female	19-21	Site 1	Second Year	no
3927672765	Female	22-25	Site 1	Third Year	No
3927655336	Female	19-21	Site 1	Third Year	No
3927452743	Male	19-21	Site 1	Third Year	No
3927063349	Male	19-21	Site 1	Third Year	No
3927029543	Male	19-21	Site 1	Third Year	No
3927013330	Male	19-21	Site 1	Third Year	No
3926998839	Male	22-25	Site 1	Third Year	No
3926976503	Male	19-21	Site 1	Third Year	NO
3926852537	Male	19-21	Site 1	Third Year	No
3926968667	Male	19-21	Site 1	Third Year	No not that I can think of
4295488375	Female	19-21	Site 1	Third Year	No suggestions
4295396352	Male	19-21	Site 1	Third Year	No suggestions
3922548498	Male	26	Site 1	Second Year	No was happy with all aspects.

4265198849	Male	22-25	Site 2	Third Year	No, I honestly believe it's a brilliant module. I'm so glad I had the opportunity to do it. I am a lot better off in college for having completed it.
4265160722	Female	19-21	Site 2	Fourth Year	None
4307791652	Male	22-25	Site 1	Second Year	None
4270105855	Female	22-25	Site 1	Second Year	none
4253871618	Male	19-21	Site 2	Second Year	none
4253863682	Female	16-18	Site 2	Second Year	none
4253856034	Male	22-25	Site 2	Second Year	none
4295018279	Male	26	Site 1	Third Year	None
4294851581	Female	19-21	Site 1	Third Year	None
4271538676	Male	19-21	Site 1	Third Year	None
4269933602	Female	19-21	Site 2	Third Year	none
4269888314	Female	22-25	Site 2	Third Year	None
4265103417	Female	19-21	Site 2	Third Year	none
4269925924	Male	19-21	Site 2	Third Year	nope not really
4251577421	Male	19-21	Site 2	Third Year	Not just do it for the one year and do it every year and if you participate in class and do assignments marks are there to be taken
4253826294	Male	19-21	Site 2	Fourth Year	not really
4295010737	Male	19-21	Site 1	Third Year	Not really
3926991307	Male	19-21	Site 1	Third Year	Not really
4285612002	Male	22-25	Site 1	Fourth Year	Not really didn't agree with the module, felt coming out of the leaving cert that I was able to study, felt the timeframe for this module could have been used better.
4269946779	Male	19-21	Site 2	Third Year	not sure
3927051591	Male	19-21	Site 1	Third Year	Not that I can think of
4271590566	Female	19-21	Site 1	Third Year	Not to have so much hours and no exams on it

4307752995	Female	16-18	Site 1	Second Year	Not to spend as much time learning different styles of learning and things like that. The aspect of the module that make you get involved and helped you for 1st and 2nd year were the best.
4265045944	Male	22-25	Site 2	Second Year	note taking style guide referencing
4294758483	Male	22-25	Site 1	Third Year	One hour a week maximum Cover more IT skills e.g. Excel
4251605742	Male	19-21	Site 2	Fourth Year	Overall purpose of the module. At times I left there was very little focus (Objectives/progression through each class)
4294707752	Male	22-25	Site 1	Third Year	people will learn what they have to learn if not possible they won't learn it
4272579710	Female	22-25	Site 1	Third Year	Perhaps some extra classes on writing skills and not just given a writing assignment, being graded on it and then improving on that, because you may have received a bad result, even though you had no proper experience in this area
4269875645	Female	19-21	Site 2	Second Year	Probably how to manage your modules, the amount of time studying and completing tasks. Timetable would be useful
4251581504	Male	22-25	Site 2	Third Year	problem solving time management
4265041608	Male	19-21	Site 2	Second Year	problem solving skills
4265128786	Male	26	Site 2	Third Year	Relevant learning such as how to use the photocopier and sending information to it on the college computer
4251559763	Female	19-21	Site 2	Third Year	should be done in a lab so you can practice doing the things you learn and are confident using programs etc
4265108338	Female	19-21	Site 2	Third Year	show different study methods instead of just one
4250530863	Male	22-25	Site 2	Fourth Year	Some classes seemed like a waste, like "How to take of yourself"
4280225441	Female	22-25	Site 1	Fourth Year	Some of it was very basic I remember spending far too long on plagiarism and referencing
4250582076	Male	19-21	Site 2	Fourth Year	stress management exam preparations
4294881249	Male	26	Site 1	Third Year	Teaching it using new innovative technologies or even latest technologies
4280233239	Male	19-21	Site 1	Fourth Year	Teaching methods

3926822039	Male	19-21	Site 1	First Year	Teamwork and class discussion
3922555589	Male	19-21	Site 1	First Year	Technology and teaching methods
4253889683	Male	19-21	Site 2	Second Year	text book
4270088272	Male	26	Site 1	Second Year	The module could be more IT oriented
3927692177	Male	19-21	Site 1	Third Year	The way it was delivered it could be more practical for example the introduction of labs for referencing and designing cover sheet.
4251571714	Male	22-25	Site 2	Third Year	There should be more concentration on how to answer exam questions and the structure of it. Improving exam vocabulary. No need for study skills everybody has their own. Concentrate on things that help people at exam and CA times
4265105684	Female	26	Site 2	Third Year	There was nothing really wrong with the module, but as a 40+ year old I would have already learned most of the skills via previous experience
4307780816	Female	22-25	Site 1	Second Year	There was so much covered that each class was based around a new topics- it would have been nice to have had more class time. Also perhaps changing to semester 2 as people in class have become more familiar with each other and may benefit more from that in the module.
4265195756	Male	19-21	Site 2	Third Year	Time, always was on in the morning so people tend to skip to sleep in. Give a better emphasis of it to the students starting it
3926812777	Male	19-21	Site 1	First Year	too boring
4295705643	Male	22-25	Site 1	Third Year	too much time allocated to L2L
3926984231	Male	19-21	Site 1	Third Year	Use more practical in the subject
4294869955	Male	26	Site 1	Third Year	useless module
4294864223	Male	19-21	Site 1	Third Year	Using IT skills more More referencing skills
4265037613	Female	26	Site 2	Second Year	Very boring
4251412883	Female	19-21	Site 2	Third Year	very drawn out / repetitive not very interesting basic skills covered again

4270696984	Female	19-21	Site 1	Second Year	Very time consuming more time could be spent on other module that are important
4269951468	Female	19-21	Site 2	Third Year	Why: we even do it
4265145684	Female	26	Site 2	Fourth Year	Yea as the 1st group to do this module the aspect of it been unknown made it lack in the understanding of what to do
4296978573	Male	19-21	Site 1	Third Year	Yes everything it was pointless especially the stupid hats
4294729816	Male	19-21	Site 1	Third Year	Yes, show students how to reference properly. We are third year students and were never shown how to reference correctly, which is causing loss of marks in assignments. Really didn't see the point of it in first year, no benefit at that stage.
3926914126	Male	16-18	Site 1	First Year	yes, the project you have to do could be more based on things you need to know in life.
A total of 219 responses were received for this question					

Appendix F – Details of conversion of raw mindset scores into scale-based classifications

Question 15 of student questionnaire sought views on the following statements with a six point Likert scale ranging from Strongly Agree to Strongly Disagree

Statement No.	Fixed or Growth Outlook	Statement
1	Fixed	You have a certain amount of intelligence, and you can't really do much to change it.
2	Fixed	Your intelligence is something about you that you can't change very much.
3	Growth	No matter who you are, you can significantly change your intelligence.
4	Fixed	To be honest, you can't really change how intelligent you are.
5	Growth	You can always substantially change how intelligent you are.
6	Growth	No matter how much intelligence you have, you can always change.
7	Growth	You can change even your basic intelligence level considerably.

As there are questions of both fixed and growth mindset in outlook the rating scale is required to be reversed between fixed and growth focused questions.

Rating for Fixed Outlook Questions	Raw Score		Rating for Growth Outlook Questions
1	1	Strongly Agree	6
2	2	Agree	5
3	3	Most Agree	4
4	4	Most Disagree	3
5	5	Disagree	2
6	6	Strongly Disagree	1

The results of these rating are then totalled to calculate an overall classification based on the following bands.

Strong growth mindset	32-45
Growth mindset with some fixed ideas	24-31
Fixed mindset with some growth ideas	15-23
Strong fixed mindset	0-14

By way of an illustrative example a respondent who answers the above questions would be converted as follows

Statement	Raw Score	Scale Score
1 – Fixed	5	5
2 – Fixed	4	4
3 – Growth	2	5
4 – Fixed	6	6
5 – Growth	2	5
6 – Growth	1	6
7 – Growth	3	4
Total Score		35

This respondent would be classified as ‘Strong growth mindset’ based on the classifications outlined above.

Appendix G – Questions to consider when developing a transition related module

- Whether to develop these transitional academic skills as part of a standalone introductory module or to embed them within all modules of the first year of a study programme.
- Should a standalone module be the choice, how, will the module be integrated with the remainder of the curriculum? As this research highlights contextualising the learning is essential.
- Should an embedded approach be the choice, how, will those responsible for the quality assurance processes be able to ensure that the desired context areas are being covered in the individual modules?
- Which development/academic skills does one include in the module, as the literature highlights many different areas. Is it possible to include all of these topics and, if so, to what extent? This research demonstrates that students cited managing your time, working with others, setting goals, learning on your own, learning from others and making a presentation as the areas that contributed to their knowledge skills and development.
- Should consideration be given to the inclusion of self-theories in the module indicative content with a view to exposing students to the concept of learning to become better learners? This research demonstrates that the students included in the study have a strong leaning towards a growth mindset.
- What means should be deployed to ensure that the learning is reinforced in subsequent modules throughout the first year and beyond? The use of a programme assessment strategy that further develops and reinforces the skills and competencies offers such a means.
- Are the developmental/academic activities confined to year one or should such elements/activities be incorporated into all years of a study programme?
- Should one choose year 1 semester 1 as the position for the module within a study programme with a view to supporting the transition to Higher Education?

- How many ECTS will be allocated to this module and associated allocation of teaching hours per week? Should the hours per week include an allocation of time for information literacy?
- What delivery model will be employed? It is suggested that small group teaching of circa 30 students per group would be the most beneficial from a learner perspective.
- Are the developmental/academic activities transferable across disciplines, essentially can you teach the same skills to Business, Humanities, Science and Engineering students?
- What is the most appropriate assessment strategy for this type of module? The assessment methods employed for the module are crucial to overall success and should be engaging for students. Elements of both formative and summative assessment are recommended including an integrative approach involving other modules or even joint assessment.
- Who are the most appropriate members of the academic staff to deliver such modules. Based on this research the role of the teacher is key to the student experience.