

# The Impact of an Online Writing Programme in Increasing Writing Self-efficacy in International Students

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## Declaration

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Thank you to my supervisor, Prof Richard Millwood for his direction and advice. A big thank you to my husband Santhosh for his love and encouragement and for doing all the cooking and shopping. To my mother Kathleen also a big thank you for doing all the ironing and dog minding. And not forgetting my colleagues and friends for their tips and advice. I could not have done this without all the support I received and for which I am very grateful.

## Abstract

Numbers of international students in western universities is increasing each year, bringing a number of benefits to host institutions, local economy. International students also benefit from studying abroad.

Many students face transitional issues when starting university. However International students face a range of transitional problems additional to those faced by local students, including isolation, adjusting to a new academic culture, possible language problems and sometimes feeling a lack in appropriate academic skills.

Research has shown that international students require specifically designed supports in a range of media that are available when and where the students need them as opposed to generic supports offered to all students.

Essay writing is a common means of both in-course and examination based assessment in universities especially for Arts and Social Sciences subjects and also to a lesser extent for the Health Sciences and Sciences. International students often struggle to understand the requirements for essay writing in a new academic environment which can lead to stress and poor grades.

This research explored the impact of an online writing programme in increasing writing self-efficacy in international students because as Bandura (1994) found, increased self-confidence leads to increased performance and achievement and measurement of skill development would have been beyond the scope of this research.

This study found that the online essay writing programme increased the confidence of the participants and corroborated previous research regarding the difficulties international students have with generic academic supports. The conclusion therefore was that a specifically designed online programme could be useful in helping international students adjust to a new academic culture and feel more confident about their abilities.

Key words – international students, academic study, confidence, transition, supports, technology, essay writing

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## Abbreviations

SLD Student Learning Development

HEA Higher Education Authority

DES Department of Education

EAP English for Academic Purposes

VLE Virtual Learning Environment

UDI Universal Design for Instruction

IDT Instructional Design and Technology

AHSS Arts, Humanities and Social Sciences

EMS Engineering, Mathematics and Sciences

HS Health Sciences

## **1. Introduction**

### **1.1 Context of and rationale for the study**

This study was inspired by observations made by the researcher regarding the difficulties faced by international students who presented at Student Learning Development (SLD) for assistance with essay writing at Trinity College. International students presented with various issues, such as being unsure of the academic writing style required, how to reference correctly, having little or no prior essay writing experience as well as language difficulties. Not all international students have these difficulties but international students formed a significant percentage of students who attended for academic support at workshops or on a one-to-one basis. Preliminary research by the researcher confirmed that international students often find adjusting to an academic environment in another country difficult and stressful.

### **1.2 Background information**

International students are a growing group of students Trinity College Dublin. Trinity College is Ireland's premier university and as a university with a global reputation for top quality higher education, it has seen a rise in the number of international students attending each year. In recognising the economic and other benefits international students bring to the university, the College's 2014-2019 Strategic Plan states that non-EU enrolments will increase from 7.8% to 18% leading to a more cosmopolitan campus and richer learning environment for all plus increased non-exchequer funding for the university and the wider Irish economy (Trinity College Dublin 2014).

As an English speaking university, Trinity College also attracts international students wishing to study through English to improve their English language skills. The current international student population comprises students from all parts of the globe including India, Brazil, China, Australia, the USA and Europe.

This increasing rise in international student numbers and the academic difficulties they face sets the context for this body of research.

### **1.3 The research question**

This research study explored the the impact of an online writing programme in increasing writing self-efficacy in international students. The research also looked at the sub questions of whether or not international students require additional supports for essay writing apart from those offered to the wider student body, what supports are available to international students to improve their essay writing skills in Trinity College as well online and what were the experiences of international students were in using these supports for essay writing. To investigate the question, a specifically designed online programme was developed which provided participants with the opportunity to self-rate their confidence levels regarding essay writing as well as provide guidance on the essay writing process, facilitate self-evaluation through interactive activities and allowed participants apply their newly acquired knowledge in a real life situation.

### **1.4 The importance of the research question**

The importance of this research question is based on three main premises. Firstly, essay writing forms a large part of the assessment of many courses in university. In Trinity College, some of the Arts, Humanities and Social Sciences (AHSS) courses assessment are 100% essay based for both in-course assessment and end of year exams. In the faculties of Engineering, Mathematics and Sciences (EMS) and Health Sciences (HS) essay writing forms various percentages of assessment. Secondly, international students are a growing body of students worldwide, with the numbers increasing each year. In monetary terms, international students generate millions of euros in college fees for the universities as well as additional money for the local economy in subsistence, travel and family members visiting. Apart from the monetary aspect, international students bring benefits to institutions including diversity on the campus and increased global awareness. Thirdly, research has shown that, in order to successfully transition to a new academic environment international students require academic supports that are tailored to their needs as opposed to generic supports provided to the wider student body. Without such supports, international students can struggle; face anxiety and depression, attain poor grades and can fail or drop out of college. Apart from the loss of money and reputational damage to the institution that accompanies dropping out, there can also be hardship caused to the student and their family.

### **1.5 The importance of the research question**

Nine participants took part in this exploratory case study. These were international university students of mixed gender, age and nationality and all were undergraduates. They were from various courses in the three faculties in Trinity College, and were attending Trinity College for differing lengths of time. Some were one semester visiting students; some were doing full time degree courses. They were in second, third and fourth year of their courses. The research was conducted over a four week period, with participants being given access to a specifically designed essay writing programme comprising a reflection section to prompt them to think about their previously acquired skills, a set of instructional videos, an essay writing template and a self-test section of interactive activities. These formed the main part of the intervention. They were also requested to take a pre and post-study online self-confidence questionnaire which measured their self-rated confidence levels on a range of essay writing skills. These pre and post confidence scores were the means for measuring changes in their confidence levels as a result of using the essay writing programme. The researcher also held one-to-one interviews with participants, post-programme, using a semi-structured interview schedule, to gather more in-depth information regarding their experience of the research. The qualitative data formed the majority of the research data while the quantitative data was used to support the qualitative data findings.

### **1.6 Findings**

The findings for this research corroborate previous research done in the area regarding the difficulties faced by international students and the academic supports required by and them. Participants had difficulty with the cultural differences in essay writing between their home and host institutions. Some had English language difficulties. Some had difficulties with the existing academic supports, such as being unable to attend workshops because of lecture schedules or finding it difficult to discriminate appropriate, reliable information from the overwhelming amount of material when searching online.

Participants' experience of using the essay writing programme was positive, with the overall feeling that it was easy to use and met most of their needs. The essay writing template was found to be useful in helping students to plan, organise and start writing their essay. All students reported feeling more confident in essay writing after using the programme and all

said they would recommend it to other students, some having already done so. The quantitative data generally supported the findings regarding increased confidence although the scores of some participants were marginally lower after using the programme. However, these students said in interview that they felt their confidence had increased, so given that the questionnaires were taken several weeks apart and the differences were marginal the decreases were not seen as accurately reflecting the way participants felt.

### **1.7 Roadmap of subsequent chapters.**

The following chapters give an in-depth explanation regarding existing research on the topic, the design of the technological enhanced teaching and learning intervention used in this study, the methodology used and the resulting findings.

The Literature review examines the research in relation to international study attending western universities and the academic supports they require. It will also look at the theoretical framework underpinning the design of academic supports for international students.

The Technology Design section gives a detailed description of the technologies involved in the essay writing programme, the rationale for using them and how the programme was designed.

The process of recruitment, the method of research used and the methods for collecting and analysing the data will be discussed in the Methodology Section.

The Findings section explains the findings of the research, the major and sub themes from the qualitative data and the significance of those findings. It also looks at the analysis of the quantitative data and how it relates to the qualitative data findings.

Finally, the conclusion summarises the research and its findings, explains the limitations of the research and looks at what the future holds in relation to this research question.

## **2. Literature review**

### **2.1. Introduction**

International students can generally be defined as those students who travel abroad for the purposes of tertiary study (Slethaug & Manjula, 2012). In doing so, they leave their own countries in order to study in a different country where they are not a citizen. Dunne describes an international student in Ireland as one who is studying in Ireland but whose home is not Ireland (Dunne 2009). However, this definition does not take into account other types of student such being non-EU, immigrants or refugees (Al-Quhen, 2012, Ly Thi 2011) or other variations such as students studying online from their own countries, those studying at international schools in their own countries etc. Having a definitive definition can be difficult so for the purposes of this review, international students are those students who have travelled from any other country apart from Ireland to study at Trinity College for any length of time from one semester to full four or five year degree courses.

International students are a growing cohort and bring benefits to both the host institutions and countries. However international students face a number of transitional issues when they move to a new country. These are additional to those faced by local students. While western universities have started to recognise this problem and have started to address it by developing supports such as orientation programmes, seminars and workshops specifically for international students, these are all place and time bound supports. Other online supports tend to be aimed at the general student body alone and do not meet the needs of international students. The literature on the topic shows a dearth of technological online supports being developed specifically for this group.

This literature review will discuss the reasons students study abroad, the associated benefits and drawbacks of same, the academic supports required by international students and what current supports are available to them and the theoretical framework for designing online technology enhanced learning materials for international students.

#### **2.1.1 Statistics on students studying abroad**

With 3.3 million students representing a 65% increase on the number of students globally studying abroad since 2000, international students are now a significant cohort of third level students. The reasons for the growth in international students are varied. The inability of

some developing countries to cater to the increased number of third level students has led to those students studying abroad (Baird, 2012). Other reasons include the desire by international students to study at the best universities around the globe in order to increase their cross-cultural knowledge and skills and improve career options (Andrade 2006, McClure 2007).

It is difficult to establish the number of international students in Ireland, as statistics on international students are compiled by more than one body including the Higher Education Authority (HEA) and the Department of Education and Skills (DES)(Christle and Godley, 2008). However, an Education Ireland 2012 publication, estimates international students in higher education in the 2011/12 academic year, generated €230 million in income for the universities plus an addition €465 million in accommodation and visitors (International Students in Irish Higher Education 2012).

### **2.1.2 Benefits of International Students to host institutions**

The international students sector is a multi-billion euro enterprise and a source of real income to universities and the wider national economy. In an increasingly financially difficult environment, international students are therefore a vital source of income (Carroll & Ryan, 2005).

However, it is not just financial benefits that international students bring to an institution. Having an international student body can enhance the learning experience for all students, can increase leadership skills, critical thinking skills and cross-cultural communication skills, can help establish global connections, international business and research networks and opportunities, and enhance the global reputation of an institution, (Andrade 2006, Bartram 2008, Lillyman & Bennett 2014, Higbee, Schultz & Goff 2010).

International students also help to increase the global awareness of local students and academics, can bring different knowledge and perspectives to the host institution (Charles-Toussaint and Crowson, 2010) and can become potential contributors to the local knowledge economy (Tange and Jensen, 2010).

### **2.1.3 Benefits of studying abroad to International Students**

International students also derive benefits from studying abroad such as developing new ways of thinking, developing their personal skills, becoming independent learners and

thinkers, bringing back new global perspectives to their respective countries, increasing their level of confidence etc. (Warring 2010, Kelly 2010). Their career opportunities increase as they develop useful networks for when they return home and they can become influential leaders in their field (Gribble 2008, Kelly 2010) as well as improving their language skills (Lillyman & Bennett, 2014).

As international students are a very real benefit to host institutions and countries, recruitment and retention of international students is therefore an important consideration for those institutions. With these factors in mind, many western universities, including Trinity College Dublin have made the increased recruitment of international students one of their strategic aims.

## **2.2 Transitional problems faced by students**

It has been found that students undergo a process of adjustment to a new academic environment initially and especially during the first 6 – 12 months, with students often feeling doubts about their academic ability, having problems with academic work, having issues around support networks and feelings of isolation (Bradley, McLachlan, & Sparks, 1990; Mullins, Quintrell, & Hancock, 1995). However, it has also been found that international students suffer from additional and specific problems not faced by local students (Ramsay, Barker, & Jones, 1999). This is not to say however that all international students share the same issues but that the issues faced by international students as a group are different to those of local students.

### **2.2.1 Transitional problems faced by International Students**

The problems faced by international students when studying in western countries is widely researched (Dawson & Conti-Bekkers, 2002). These include problems arising from communicating in a different language, different communication styles, cultural differences, different academic environments and different expectations regarding the students' level of independent learning, different learning cultures e.g. teacher led versus student orientated, isolation from loss of support networks, homesickness, and financial problems (Slethaug & Manjula 2012, Andrade 2006). Other issues include different assessment styles, understanding plagiarism, problems with collaborative learning as well as personal issues



such as the death of family or friends in their home country and anxiety about returning home. (Sherry, Thomas, & Chui, 2010)

For some students, where English is not the student's first language there are problems such as being slower to read, having more difficulty understanding lecturers accents, being slower at assignments and feeling reluctant to speak out in front of peers or to ask questions for fear of ridicule of their English usage (Slethaug & Manjula 2012). Even for students who speak English as their first language e.g. students from the USA, or students who are educated through English such as some students from India, there is still an adaptation to a different way the English language is spoken, difficulties with accents, as well as use of colloquialisms or expressions (Mayer, 2003)

### **2.3. International Students and new academic environments**

While it can be seen that international students experience a wide range of difficulties when studying abroad, this review is concerned primarily with the academic challenges faced by them and specifically essay writing. This focus is due to the researcher's background in providing academic support to students in university and seeing first-hand the academic problems presented by international students attending for academic support.

Ramsay et. al. (1999) has looked at the academic adjustment students go through in order to obtain an academic fit with the academic environment in which they are studying and found this adjustment can be considerable, depending on the differences between the environment from which they come and the one to which they have arrived.

Teaching and learning styles can be very different to those in their home countries. (Durkin 2004 cited in Ho 2010) found that Chinese students were more comfortable with a more teacher-centered style of learning with exam based assessments and found the critical reading and writing, collaborative work and discussions in the U.K. difficult to adjust to, which affected their academic success.

Chalungsoth and Schneller (2011) also found that international students often need to adjust to new learning strategies while Yeh and Inose (2003) found that the use of academic writing and language expected in the host institution can cause problems of understanding leading to frustration for international students.

With the range of academic challenges facing international students, it is important that institutions provide appropriate supports to assist them with their studies. A review of the research in the area of attrition rates in Australian universities, found 14 studies which cited academic skills support along with pre-enrolment advice as key in improving student retention outcomes (Zepke & Leach, 2005).

#### **2.4. Academic supports**

Some third level institutions offer workshops and orientation sessions for international students to assist them to adjust to the new academic environment. Most offer generic academic skills information on websites or academic support services available to the student body in general.

However, according to Dawson and Conti-Bekker (2002) 'International students experience a wide range of transitional difficulties associated with their change of physical, cultural, and educational environment. In addressing such difficulties, it is not sufficient to offer international students a standard "guide to success at an Australian university.' This realisation is borne out by Sleuthag and Manjula (2012) who have found that universities are now designing new programmes specifically for international students as they compete with other institutions to recruit international students. One Australian study found that international students offered specific academic support around academic reading and writing and examination strategies, achieved higher grades

Study skills courses offered are by many institutions. Study skills however tends to be a term that covers an array of supports and does not cover the same skills in different institutions. According to Peelo & Luxon (2007), international students often have to decode what 'study skills' means to decipher if they are of use to them or not. And while 'study skills' would convey the notion that if you develop these skills you will be a competent student, some research indicates that generic courses are not very effective in developing appropriate skills. There is some evidence that these skills need to be embedded with particular course content and be subject-specific. Asmar (2005) found institutions are now moving into more specific courses designed around specific degrees and are moving away from the generic skills courses offered to international students and towards embedded content courses which are more relevant.

From Clark and Ivanic's perspective writing is 'as a social practice, embedded in social relations within a specific community, each with its own complex ideological and conventional practices' (Clark & Ivanic 1997 cited in Peelo & Luxon 2007). Sheridan (2011) found that while the study skills approach considers that individual skills of writing such as sentence structure, paragraph writing etc. can be learned and applied across different disciplines; the actual academic writing process is embedded in a particular community and has norms and rules specific to that community or subject. She therefore finds that these skills need to be taught in relation to the subject being studied.

However, other research has found that specific writing skills courses, while not focussing on discipline content but focusing instead on associated writing skills such as planning and structuring, critical reading, thinking and writing, referencing and plagiarism can be beneficial for international students, for example, Ramsay *et al.* (1999) found that the Learning Assistance Centre in one institution was seen as a positive factor for international students in developing critical analysis, critical thinking skills and English language skills. Sherry *et al.* (2010) also found international students were positive about the support received by the Writing Centre in their institution in helping them develop their English language communication skills with the recommendation that the Writing Centre be strongly promoted to international students.

Within the writing skills framework, essay writing is one area in particular with which international students often struggle. Long essays are often not a feature of international students background and Ferenz has found that they have little or no knowledge of the western writing process and the stages of planning, structuring, drafting, editing, referencing etc. or searching for relevant sources (Ferenz 2005 cited in Sheridan 2011). Sheridan (2011) has found that the lack of skill on the international student's part leads to a feeling of helplessness and increased anxiety while,

The writing conventions within an institution need to be understood by students in order to be academically successful Nambiar, Ibrahim & Meerah (2012). While some researchers find that these skills need to be course specific, others find that the academic conventions of an institution can be learned and adapted to specific content in different disciplines and for the purpose of this research study, this is the approach that was adopted.

## 2.5. Technological academic supports for International Students

While the various types of supports discussed previously are aimed at helping international students adjust to the new academic environment, they tend to be of a face to face variety with students attending workshops, tutorials, orientation programmes or seminars. Lillis (1997) finds that when it comes to learning about writing conventions, one-off learning situations do not suffice as students, who are unable to attend these events for whatever reason, are then denied the supports they need. International students need to have access to information regarding these conventions and how they can use them, at various times during the year. It is therefore important to offer students online supports with anytime access. Also as some students prefer to learn through a variety of media such as videos and audiotapes (Mullins et al., 1995) it is important that supports are offered in multimedia formats.

Technology interventions are therefore a useful way to provide support to international students. Technology features heavily today in the lives of most third level students and universities are increasingly developing means of interacting with students through technology in the form of websites, virtual learning environments (VLE), podcasts etc. However, a review of the literature in the area shows a dearth of technological tools being developed specifically for international students to help their academic skills development. The University of Adelaide is one institute that has developed a range of online multimedia supports for their international students (Appendix 1). However, many institutes, for example, Monash University, provide text based supports which, while extensive, can be difficult and slow for an international student to navigate (Appendix 2).

## 2.6. Theoretical framework for technology enhanced teaching and learning

### 2.6.1 Constructivist Learning Theory

Constructivist learning theory postulates that learners acquire knowledge by actively constructing it, fitting new information into their existing body of knowledge and either expanding on the existing knowledge or supplanting it with new knowledge. Learning cannot take place without changing or adding to previously existing knowledge (Fry, Ketteridge & Marshall, 2009). This process happens through structures in the mind called schemata which hold the knowledge that individuals have created over time. The mind is continuously taking in new information and either assimilating it within the existing schema or accommodating it by creating new schema. In this way learning takes place at an individual level and is actively constructed through the changing schemata (Biggs & Moore, 1993).

### 2.6.2 Self-Regulated Learning Theory

Self-Regulated Learning Theory is an aspect of constructivism that has been described as an 'inherently constructive and self-directed process' (Winne, 1995). The ability to self-regulate learning is a key skill in successful learning in college students (Boekaerts, 1999). Wong and Kerr (2009) also believe that the self-regulated learning approach is recommended for higher education because it most realistically reflects work and research in the real world outside of academia.

Self-regulated theorists define the theory differently depending on their theoretical perspectives. However, some common aspects have emerged. Zimmerman (1986) believes self-regulated learning revolves around three elements: metacognition, motivation and behavior. Metacognitive processes such as planning, organizing, and goal setting are those strategies which allow a student to be aware of and in control of their own learning. Motivational processes include self-efficacy or belief in one's abilities and intrinsically driven interest in a task that will persevere in the face of obstacles. Behavioural processes include behaviours such as advice and information seeking and structuring learning environments to ensure optimum learning takes place.

Boekaerts' model of self-regulated learning similarly has three central concepts: metacognitive strategies (how students think about their learning); cognitive strategies (the learning strategies that students employ such as questioning, note-making, memorizing techniques)' and motivational strategies including self-efficacy.

While there are variances in how self-regulated learning is defined, at a fundamental level it is about students taking charge of their own learning and employing appropriate learning strategies which are constructively adapted to achieving successful learning outcomes (Zimmerman & Schunk, 2013). Self-regulated theorists regard how students perceive themselves as learners and the strategies they use in their learning as critical in academic achievement (Zimmerman, 1986).

In relation to an increasingly diverse student body in many western universities, Cassidy (2011) believes that the self-regulated theory best meets the individual learning needs of students. Baumart, Klieme, Neubrand, Prenzel, Schiefele, Schneider, Tillmann and Webb (2000 cited in Cassidy 2011) believe that with uncertainty regarding the future learning needs of students and attention being given to lifelong learning, the ability to regulate one's learning is a vital component for student learning today.

### **2.6.3 Self-Efficacy**

While self-efficacy has been mentioned as an aspect of self-regulated theory, it is worth discussing it in more detail because increasing participants' self-efficacy forms a central aspect of this research study. Self-efficacy as a concept was first promoted by Bandura in the 1950s and refers to one's belief in one's abilities. Bandura (1997) found the general definition of the term 'confidence' was vague and didn't measure the strength of belief that people had when using the term in relation to their abilities. He believed that 'A self-efficacy assessment, therefore, includes both an affirmation of a capability level and the strength of that belief. Confidence is a catchword rather than a construct embedded in a theoretical system'. Bandura investigated the role of self-efficacy and found that those with low self-efficacy were more likely to overestimate difficult situations and their ability to successfully deal with them while those with high self-efficacy were better able to deal with adversity and harness the internal resources to deal with it (Bandura 1982). In recent years, research

has taken place on the role of self-efficacy in education and it has been found that increased self-efficacy leads to greater motivation and improved performance and achievement (Pajares 2006). In one study it was found that 'Writing self-efficacy predicted performance, albeit modestly... These results support the possibility that beliefs about writing could be a leverage point for teaching students to write.'(Sanders-Reio, Alexander, Reio, & Newman, 2014).

For the purposes of this research, participants rated the strength of their belief in their capability level regarding a number of essay writing skills from 'cannot do at all ' to 'certainly can do' using a Likert questionnaire based on Bandura's guide to designing a rating scale (Pajares, 2006). Self-confidence was used in place of self-efficacy as self-efficacy is a theoretical concept not widely known or understood in the general population whereas self-confidence is a term most people would be familiar with.

## **2.7. Conclusion**

International students are an important component of universities in many western countries. They bring a range of benefits such as diversity to the campus and revenue to the institution. International students also benefit as they gain an increased global perspective and encounter opportunities for networking and international collaborative research.

While most students face transitional difficulties during the first year of university, international students face a number of difficulties in addition to those faced by local students. It is important that international students are supported in their studies in order to minimise stress to the student, improve academic achievement and increase student retention for a number of reasons previously stated.

The current supports available to international students include time and place bound supports in institutions or generic information provided by websites or on VLEs. These are often not designed specifically for international students and it can be difficult for international students to discern which are the most appropriate or reliable. Therefore a range of specifically designed technological interventions could be a useful means of providing international students with the specific academic supports they require, in different learning formats and available when and where they are needed. The benefits

could be seen in improved academic success and increased confidence for international students as well as increased international student retention with resulting benefits to host institutions.

Self-regulated learning theory provides a theoretical framework for designing teaching and learning materials so that they support international students in their efforts to develop learning strategies that will maximise their learning potential. Self-efficacy is an important concept to include in the design as increased self-efficacy is positively linked to improved academic performance and achievement. Along with multi-media instructional design principals and cultural sensitivity, they form the framework for designing online teaching and learning tools developed for international students so as to ensure that all students, regardless of their ability or skill level can use the tools in the way that suits them the best.

The dearth of specifically designed online technological interventions for international students was seen as an important gap in the supports currently being offered to international students which this study set out to research.



### **3. Design of Technology Intervention**

#### **3.1 Introduction: Technology and essay writing**

As discussed in the literature review, technology is used as part of institutions' academic supports to their student populations in general. This takes the form of websites or VLEs hosting a range of supports including text documents, videos and audio files many of which are interactive. Some institutions offer specific supports to international students in the form of English language classes or writing workshops. Online, specifically designed programmes however are not widely available and could possibly provide much needed academic support to international students when and how they want them. This study therefore sought to design an online technology enhanced learning programme which would assist participants to increase their confidence in essay writing, develop their essay writing skills and practise those skills in a supportive framework in a real-life context. It also sought to indirectly encourage the development of self-regulated learning strategies as participants progressed through the programme.

The pedagogy, as previously discussed, underscoring the design of this programme is constructivist self-regulated learning theory whereby the student actively constructs their own knowledge by employing a range of metacognitive, motivational and behavioural learning strategies. These were incorporated into the design of this programme by encouraging participants to reflect on existing skills before learning new ones, guiding participants through new concepts and skills using a scaffolded intervention, encouraging self-evaluation through a range of interactive activities and applying new knowledge in a real-life situation.

Principles of multimedia instructional design and cultural sensitivity were also important considerations in designing the programme. Instructional design principles as developed by Mayer formed the basis of the multimedia aspects of this programme and will be discussed later in this section.

Because the level of cross-cultural educational material that is being developed and exported every year is growing and requiring increasing resources 'the issue of culture in the field of Instructional Design and Technology (IDT) is gaining ground and an increasing

audience of interest.’ (Rogers, Graham, & Mayes, 2007). Cross-cultural design means designing materials that are useable in different cultures. Cultural sensitivity was accommodated in this project through the use of: appropriate language i.e. language that is not ambiguous does not use colloquialisms and does not refer to local events or geographical locations, use of neutral images rather than those associated with a particular culture and use of simultaneous narration and text and appropriate pace of narration for students with English as their second language.

Increasing self-efficacy was an important aspect of the programme and accommodated throughout the programme through the opportunities for students to put what they had learned into real-life practice. The use of a pre and post essay writing programme to measure changes in confidence allowed participants to see how their scores had changed as a result of using the programme.

After examining the pros and cons of a number of possible technologies, technologies chosen were based on the criteria of fit for purpose, ease of use, flexibility, cost and accessibility (Appendix 3).

### **3.2 Description of the learning experience**

The learning experience in this study involved the participants engaging with an online essay writing programme at any stage over a four week period. The aim of the programme was to evaluate whether or not such a programme could increase their confidence in essay writing. As previously mentioned increased self-efficacy leads to increased motivation, improved performance and achievement. Participants were asked to reflect on essay writing skills such as critical thinking, that they might have already developed from previous assignments or other non-academic tasks. They were then guided through the essay writing process by a series of short animated videos which contained prompts for participants to start developing their essays using an essay writing template which was provided. Finally participants were able to evaluate what had been learned through the use of interactive activities.

The following technologies were utilised to form the technology enhanced learning experience.

### 3.2.1 Description of technologies used

Table 1 Technologies Used

Technology used	Purpose	Rationale for use
Camtasia Studio 8	Screen recording software programme	Allows videos to be produced in a variety of formats. Used to record Powtoon videos and convert to MP4 for embedding on Blackboard.
Skype	Telecommunications software that allows users to communicate through video chat and video calls online from computers, tablets, smart phones to similar devices	One student was in Singapore and Skype allowed free video call with them.
PowToon	Animation video software programme	Uses templates to create videos with animated characters, voice narration and text. Videos can be shown from Powtoon website or YouTube or downloaded to own device. Easy to make entertaining animated videos aimed at adult learners. Free version provides sufficient options but additional functionality can be bought.
Survey Monkey	Online service that allows users to create web browser based surveys used to gather data on participants' levels of procrastination and their evaluation of the installation	Easy to set up questions with different answering options e.g. multiple choice, yes/no, ranked. Good data analysis tools. Available to researcher
GLO Maker	Authoring tool, allows interactive learning using various media Design driven based on three stages: Introduction, understanding, construction	Allows for the creation of fun, interactive activities for adult learners. Easy to learn and use, free
Blackboard	Virtual learning environment used by Trinity.	All students have a Blackboard account so wouldn't need to learn to use new technology. Researcher was familiar with creating content for Blackboard also.
Microsoft Outlook	Software that allows one to send, receive and manage e-mail, and also manages calendar and contacts. Used to recruit participants initially and to communicate with participants throughout the study.	Easiest method available to researcher for contacting participants for recruitment and correspondence, easy to use, can set up specific folders to manage communication, can send variety of materials e.g. images, pdfs, word docs, weblinks

### 3.2.2. Survey Monkey

A web based survey tool allowed for the gathering of quantitative data using a Likert rating scale. As well as collecting quantitative data for the research, the questionnaire encouraged participants to consciously think about their confidence regarding specific essay writing skills and allowed them to compare their pre and post programme scores to see how their confidence levels had changed. Participants' self-reported their confidence levels on a range of skills used in essay writing such as planning, structuring, critical thinking and referencing (Figure 1). The decision to rate confidence rather than skill was based on two main factors. One, the timescale of the project which was over a four week period meant that it would not be possible for each participant to submit a number of essays to be assessed in time to do comparative studies on outcomes. Two, as mentioned in the literature review, there is a correlation between increased self-efficacy and improved performance and achievement, self-efficacy change was therefore seen as useful to assess in lieu of skill development.

Figure 1. Example of questionnaire from Survey Monkey

The image shows a screenshot of a Survey Monkey questionnaire. It contains seven items, each with a Likert scale from 1 to 10. The scales are labeled as follows: 1 Not at all confident, 2, 3, 4, 5 Moderately confident, 6, 7, 8, 9, 10 Highly Confident. The items are:

- 7. The following questions list different activities. Rate how confident you are that you can do them as of now. Rate your degree of confidence by recording a number from 0 to 10 using the scale given for each question:  
Based on Bandura's rating scale construction <http://www.uky.edu/~eushe2/Bandura/BanduraGuide2006.pdf>
- 8. I can plan the different parts of writing an essay so that I complete it on time.
- 9. I can structure an essay so that has a logical flow and is coherent
- 10. I can do an essay outline to help structure my essay
- 11. I can write well in English
- 12. I can reference in the correct style
- 13. I can reference appropriately i.e. I know what has to be referenced

### 3.2.3. GLO Maker

GLO Maker is an authoring tool designed for educational purposes by the Learning Technology Research Institute, London Metropolitan University. It allows interactive learning using various media.

As has been discussed in the literature review, international students enjoy learning through a range of media and GLO Maker allows for the design of interactive learning tools using various media such as video, audio, text and graphics plus interactive activities like matching phrases, filling in blanks, organising phrases (Figure 2). This facilitated different learning styles making it more accessible to different types of learners. For international students, one study found that students learned better when they had access to simultaneous visual and verbal material with some preferring visual display to verbal, and vice versa depending the learning style of the participants (Plass, Chun, Mayer, & Leutner, 1998)

Figure 2. Example of GLO Maker graphics

The screenshot displays a matching activity within the GLO Maker interface. It consists of two columns of text boxes. The left column contains the following phrases:

- I plan my essays by
- I use a timeline for different tasks
- I look at the verbs and key words in a question to
- Rewriting the question is my own words
- The Department student hand-book is a good place to
- I develop an outline as a
- Finding literature is easier when
- Before I develop an outline I
- Organising my study sessions so I know what I'm doing in advance

The right column contains the following phrases:

- do some preliminary reading on the subject for an overview of it.
- get information about formatting, referencing styles, other requirement etc.
- making a list of tasks and giving them deadlines.
- to ensure I get them done on-time.
- I have an outline as it guides what I need to look for.
- helps me be work more effectively
- understand what it is asking.
- helps me clarify what I am writing about.
- way of organising my essay so it has a logical flow.

Lines connect the phrases as follows:

- 'I plan my essays by' connects to 'do some preliminary reading on the subject for an overview of it.'
- 'I use a timeline for different tasks' connects to 'making a list of tasks and giving them deadlines.'
- 'I look at the verbs and key words in a question to' connects to 'understand what it is asking.'
- 'Rewriting the question is my own words' connects to 'to ensure I get them done on-time.'
- 'The Department student hand-book is a good place to' connects to 'get information about formatting, referencing styles, other requirement etc.'
- 'I develop an outline as a' connects to 'I have an outline as it guides what I need to look for.'
- 'Finding literature is easier when' connects to 'helps me be work more effectively'
- 'Before I develop an outline I' connects to 'helps me clarify what I am writing about.'
- 'Organising my study sessions so I know what I'm doing in advance' connects to 'way of organising my essay so it has a logical flow.'

At the bottom of the interface, there are buttons for 'Submit', 'Reset', 'Previous', and 'Next', along with a 'Slide 2 of 6' indicator.

The essay writing programme was divided into three stages.

Stage one of the programme introduced the topic and was used to encourage students to reflect on the key skills in essay writing that they might have already developed through academic or non-academic activities. Bandura found that students' self-belief in their abilities was influenced by how they had mastered skills previously (Bandura, 1997) and while not directly connected to mastery of essay writing skills, it was hoped that encouraging students to reflect on similar or related skills they had might increase their self-efficacy in essay writing and help overcome any feelings of not having appropriate skills which McLean and Ransom (2005) found can be a problem for international students.

Stage two focused guiding participants through the new skills needed for essay writing through the media of animated videos. As mentioned previously, research has shown that multi-media is an important component of teaching and learning for international students. In this section therefore videos were made using PowToon and Camtasia, incorporating animated graphics, narration and text.

Initially videos were embedded in GLO Maker which was then embedded in Blackboard. However, technical difficulties meant the program would not run consistently when opened on Blackboard despite re-configuring the Blackboard server. It was decided therefore to embed the videos directly onto Blackboard.

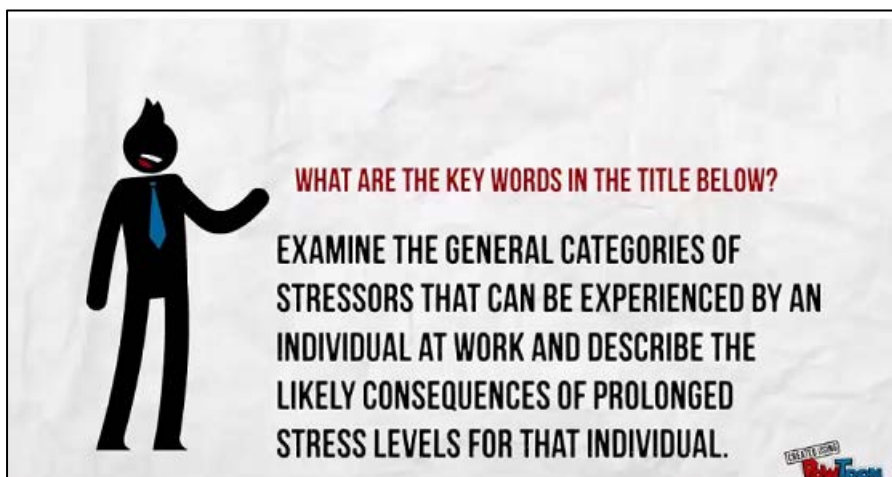
### 3.2.4 PowToon

PowToon is an animation video software programme which uses templates to create videos with animated characters, voice narration and text. PowToon was chosen due to its ease of use, ready to use templates and the ability to combine narration, text and graphics easily and in an interesting way to make engaging videos. A free version offers an acceptable level of functionality for this project but for a fee, additional functionality in the way of increased range of graphics and backgrounds can be got. The videos are suitable to an adult audience, an important consideration in creating teaching and learning tools for third level education. PowToon also allowed for the use of culturally sensitive graphics which were mainly representative images that could be related to any culture. Editing was limited in PowToon so the videos were downloaded into Camtasia where they were edited and produced as MP4 videos for embedding on Blackboard.

### 3.2.5 Camtasia

Camtasia is a screen recording and video editor which was used to convert the animated videos made in PowToon into an MP4 format which was compatible with Blackboard (Figure 3). Camtasia allowed for video editing to improve the quality of the videos and voice narration to allow each video to have a voice-over narration of the content.

Figure 3. Example of Instructional video made with PowToon and Camtasia



The stages of essay writing were broken down into short components. Videos of less than 4 minutes per component were used to explain the various processes to the student. Video design was based on Mayer's twelve principals of instructional design of multi-media incorporating principles such as exclusion of irrelevant material, highlighting essential material, breaking larger tasks into smaller more manageable ones and the redundancy principal (simultaneous text and narration). See Appendix 4 for Table of Instructional Design Principles (Mayer, 2014).

In relation to the redundancy principal, researchers have different opinions on its merit. Some have found that having simultaneous text and narration have a negative effect on learning caused by cognitive overload which occurred when the same information was presented in different formats, thus splitting the cognitive processing of information leading to reduced learning. They found the solution being to use narration only rather than narration and text (Debusse, Hede & Lawley 2009, Kalygaa, Chandler & Sweller 2004, Mayer & Moreno 2003)

However, Clark and Mayer found that when the pace of the material is slow, then cognitive overload can be avoided even when using narration and text simultaneously (Clark & Mayer 2003). Furthermore in the case of international students where English is their second language, evidence has been found to show that using both visual and verbal media improved second-language learning. (Plass et al., 1998). While the emphasis of this research was not on second-language learning, it was felt that, based on this evidence, where participants' level of English language acquisition was low, having both types of media would be of benefit in using the programme.

### **3.2.6 Word Document essay writing template**

A word document essay writing template was provided as part of the second stage of the programme. This allowed students to develop their essay incrementally using prompts from the instructional videos e.g. after the video on developing an outline, participants were directed to the template to start developing their essay outline. Word document format was chosen as the most appropriate as Adobe Forms which were initially the preferred choice were rejected as the template didn't allow for a wraparound facility when writing paragraphs resulting in a long line of text, only a portion of which could be seen at any one



time, thereby not giving students a full overview of what they are writing. Google forms were also rejected as being hosted on a Google site they did not allow students to own the documents and keep them on their own computers. As the template was the start of the students developing their essays, it was important that they had full control over the document.

The essay writing template encouraged participants to develop different parts of their essays incrementally throughout the programme (Figure 4) using a scaffolded approach. Scaffolding is a term developed by Bruner and similar to Vygotsky's Zone of Proximal Development (ZPD). Both theories postulate that students construct new knowledge initially through the assistance of someone with higher level skills or knowledge and the use of inter-active activities. As the student constructs new knowledge and master the concepts, skills etc. they become independent of the teacher thus requiring less support over time. In Bruner's theory, this is analogous to a scaffold initially providing maximum support but gradually being decreased as less support is required (Pea, 2004).

Figure 4. Example of essay writing template

**Build your Essay Outline:**

**Essay Title**

**What are the key words**

**What are the verbs**

**Rewrite title in your own words to clarify your understanding**

**Introduction – brief overview of your essay**

Type here

**Main Body – what are the main sections and sub-sections**

Point A  Type here

Sub point a.  Type here

Sub point b.  Type here

Sub point c.  Type here

Point B  Type here

Sub point a.  Type here

Sub point b.  Type here

Sub point c.  Type here

Point C  Type here

Sub point a.  Type here

Sub point b.  Type here

Sub point c.  Type here

**Conclusion – to be done after main body is completed**

The third stage in the programme, allowed the learner to self-evaluate their new skills through a range of interactive activities in GLO Maker, such as phrase match and re-organising phrases (Figure 5). Self-evaluation is an important element of self-regulated learning as it allows the learner to take ownership of their own learning (Black & William 2009) and is a key skill in students becoming more effective learners (Zimmerman, Bonner & Kovach 1996).

Figure 5. Example of self-test activities

This word puzzle is about critical thinking. Click on the phrases below to put them in the correct order. Hit submit when you are finished or reset to redo the quiz. The text below is taken from Charles Darwin University website <http://learnline.cdu.edu.au/studyskills/studyskills/criticalthinking.html> (What does critical thinking involve). If you don't get it right, you can check your answer by looking up the website.

You are not

Slide 3 of 6

GLO Maker and the videos were then embedded on Blackboard, making it easily accessible to students at any time and from any location.

### 3.2.6 Blackboard

Blackboard is a virtual learning environment used at Trinity College. It was decided to use Blackboard to host the essay writing programme (Figure 6) because all Trinity students are enrolled on Blackboard as part of their courses and were therefore likely to be familiar with its operation. This meant they did not have to learn a new technology in order to access the programme. This was an important consideration as difficulty accessing technology could have deterred potential participants from using it. Blackboard also has confidentiality controls in place through the use of username and password, and is approved by Trinity College as a method of gathering work submitted by students, it was felt to be a suitable platform.

Figure 6. Screenshot showing location of essay writing programme on Blackboard



## **4. Methodology**

### **4.1 Approach - Exploratory case study**

This chapter explains the research approach, research methods and procedures used in this study.

This is an exploratory case study the aim of which was to explore if an online essay writing tool could improve the confidence of international students in essay writing. Exploratory methods were chosen as they allow for in-depth and rich content to be gathered in order to gain a deeper understanding of the issue. A case study was chosen because as Yin (1994), states a case study 'Investigates a contemporary phenomena within its real life' while according to Rowling case studies can be used to study real life situations and can use mixed methodologies (Rowley, 2002). An exploratory case study therefore allowed for the gathering of in-depth information with regard to the question being investigated in a real life context of an essay writing assignment that the students were working on. Exploratory case study was also a way of creating valid rather than reliable findings given the small sample involved.

### **4.2 Mixed methods approach**

A mixed methods approach was considered the most appropriate for this study as this allows for the gathering of both quantitative and qualitative data. Both sets of data were not equally weighted however. Quantitative data collection was used primarily to establish a base line of confidence against which any gain or loss in confidence after using the programme could be measured. The majority of the data collection and analysis used qualitative methods to gain a more in-depth perspective of the participants' views, opinions and feelings. Quantitative methods were used to support the findings of the qualitative aspect of the research.

Mixed methodologies help reduce the level of bias in the findings and Creswell & Plano found 'the use of quantitative and qualitative approaches in combination provides a better understanding of research problems than either approach alone.'(Creswell & Plano 2011).

Qualitative data was gathered from participants through individual face-to-face interviews with the researcher, using a semi-structured interview schedule. Interviews were arranged within a week of the participants completing the essay writing programme and the post-programme questionnaire study in a location that was mutually suitable for researcher and participant. The timeframe chosen allowed for flexibility in organising times around work and lectures but also was sufficiently close to the participants using the programme so that their memories would be fresh.

Quantitative Data was collected through an online questionnaire using Survey Monkey. The questionnaire was deployed pre and post programme. The pre-programme questionnaire score served as baseline regarding the student's perceived level of confidence in essay writing skills prior to using the essay writing programme. Participants' pre and post-programme scores were compared to measure what, if any, change in confidence had occurred, thus giving an indication of the level of success or not of the programme and which could be used to support the findings of the qualitative interview research.

#### **4.3 Participants in study**

Participants in this study were Trinity College registered international students, over 18 years of age, not 'off-books' and who had concerns about their ability to write essays. Although age (apart from being over 18), gender and nationality were not criteria for participation in the research, this data was collected and analysed for demographic purposes.

#### **4.4 Recruitment Procedure**

Students were recruited through the Global Officers in the Faculty of AHSS who gave a hard copy advertisement (Appendix 5) to a group of 50 international students meeting for a coffee morning. The Global Officers also emailed the information to students on their email lists. Additionally a college-wide email was sent to all undergraduate international students giving cursory information about the project and inviting interested students to email the researcher for further information. This was considered to be the most effective and direct way of reaching all students in college. 31 students replied expressing an interest. More in-depth information was sent via email (Appendix 6) to interested parties with an Information sheet (Appendix 7) and consent form (Appendix 8) attached. Interested participants were asked to reply stating they had read the information sheet and agreed to the conditions in

the consent form and that they would sign a consent form at interview stage if they wished to participate in the research. 17 students replied agreeing to the conditions and were enrolled on the project. Of the 17 who agreed to the conditions, 12 did the initial self-confidence questionnaire and 9 proceeded to complete the full programme and post-study questionnaire.

As a way of encouraging students to continue using the programme to interview stage, participants were told they would receive feedback on the draft essays they wrote using the essay writing template, when they met with the interviewer for the post-programme interview. They were also told they would be entered into a draw for a 25 euro voucher. As recruitment in previous research studies was difficult, it was felt that incentives were necessary in order to be assured that there would be sufficient participants. While there is some debate about whether or not use of incentives in research is ethically appropriate Grant and Sugarman (2004) found that if other aspects of the research meet ethics approval, then a small incentive for recruitment purposes is generally benign.

#### **4.5 Ethical Considerations**

Ethics approval was confirmed by the School of Computer Science and Statistics (Appendix 9). All participants were provided with information sheets regarding the purpose of the research and what they would be required to do. All participants were also required to give their consent to participate in study and agree to the conditions in the consent form prior to participating in the study.

#### **4.6 Procedure**

This study took place over a four week period from 23<sup>rd</sup> February to 20<sup>th</sup> March 2015.

Participants were given instructions by email on how to access the pre-programme questionnaire (Appendix 10) and requested to complete the questionnaire (Appendix 11). Once they had completed that, they were enrolled on the Blackboard module and emailed instructions for using the programme (Appendix 12).

Once participants had completed the essay writing programme they retook the confidence questionnaire. The researcher who had access to all scores was then able compare the changes in the pre and post sets of scores and evaluate what if any changes had occurred in

participants' confidence as a result of using the programme. Participants were also able to compare their own set of scores to ascertain if any changes in confidence had occurred.

#### 4.7 Data collection tools

Qualitative and quantitative collection tools are shown in Table 2.

Qualitative data was collected via a post-programme interview with the researcher. A semi-structured interview schedule (Appendix 13) was employed using both closed and open ended questions to get some demographic information and also elicit participant's feeling and opinions on their experience of using the essay writing programme and how they felt it affected their confidence in essay writing plus any suggestions for improving the programme and to guide participants to discuss a number of aspects around difficulties faced by international students and academic supports for international students.

Quantitative data collection was done via online pre and post research questionnaire using a Likert scale. These questions asked participants to rate their level of confidence on essay writing to give an overall confidence score. The questionnaire design used a Likert scale ranked from 0 to 10 using a one point interval with 0 representing 'cannot do at all, 5 being 'moderately can do' and 10 being 'certainly can do'. The design of the questionnaire, the phrasing of the questions and the ranking options were carefully chosen based on the guidelines by Albert Bandura in 'Guide for Constructing Self-Efficacy Scales' (Pajares 2006). However, while Bandura argued that the 100 point scale offered users a greater range from which to more precisely rate their skills, it was decided to amend this scale to a ten-point scale because the format available on Survey Monkey would have made a 100-point scale unwieldy and impractical.

Table 2 Data Collection Tools

Stage	Method	Rationale
1	Pre-study survey – quantitative questionnaire	Participants answered 13 questions using a ranked scale of 1-10 to ascertain an overall confidence score in essay writing.
2	Post-study survey – quantitative and	Participants answered the same 13 questions to gain an overall score which could then be compared to the original pre-study score.
3	Qualitative face-to-face Interview	Participants were interviewed using a semi-structured interview schedule using both closed and open-ended questions

## 4.8 Data Analysis

### 4.8.1 Qualitative Data Analysis

Qualitative Data was collected through face to face interviews with participants using a semi-structured interview schedule which allowed for the capture of factual data such as participants' age and nationality but also allowed for the more in-depth exploration of their thoughts and feelings.

Interviews were recorded and the first five transcribed in order to accurately capture what the participants had said. The content of the interviews was analysed by identifying common words, phrases or ideas, as soon as possible after being collected in order to discover recurring themes and patterns. These themes were then categorised to form major categories with sub-themes. This process is in keeping with the qualitative analysis process as outlined by Taylor-Powell and Renner (2003) who say that this is the crux of qualitative analysis and involves 'reading and re-reading the text and identifying coherent categories'.

For practical reasons, once themes had been established by the first five interviews, relevant notes, rather than verbatim transcribing, were taken from the remaining four interviews. Notes pertaining to any new, emerging themes were also taken. With participants whose first language is not English, it was at times necessary to interpret the meaning of the conversation rather than take what was said literally. Interpreting was done by taking into account the context of the conversation, observing the participant's overall use of English and other non-verbal cues such as hand gestures.

### 4.8.1 Quantitative Data Analysis

Two sets of data regarding thirteen questions were gathered for each participant through a Likert self-efficacy in Survey Monkey as discussed previously. The data was exported to Excel for analysis. All scores were re-calculated using Excel to ensure accuracy. Some of the participants' final scores had been calculated incorrectly by participants. When corrected in Excel, recalculated results showed a more positive result than the original scores (Appendix 14).

Both sets of scores were analysed to discover level of change in confidence in participants as a result of using the essay writing programme. This was done by comparing post-programme scores against pre-programme scores and calculating the differences in both



scores. These differences were then calculated as a percentage of the original score to give an overall percentage change in confidence of participants (Table 3).

The quantitative data analysis findings were used to support the qualitative data findings and also as a way of showing participants a concrete measurable outcome for their change in confidence as a result of using the essay writing programme.

#### **4.9 Limitations of study**

There were a number of limitations with regard to this study.

While only nine participants proceeded to the interview stage, this was deemed sufficient for the scope of this research and the resources available and to provide validity to the findings. However, the sample size is too small to be considered reliable as it could not be said that a significantly larger group of participants would produce the same results. A larger cohort of participants would therefore have given more reliable findings.

Given resources available, the essay writing programme was designed as a generic essay writing programme. Having specifically tailored programmes for each faculty could have had different results in the confidence for participants from different faculties.

Participants were attending Trinity for varying lengths of time; one semester, four year degrees etc., with some having already written essays at Trinity while some had not written any essays at Trinity prior to the programme. Although this is not necessarily a disadvantage for the study, it meant that it was not possible to conduct the research on a group of students with similar experience of essay writing which might have been an interesting topic to explore.

Additionally students had different essay assignment deadlines with some were not ready to start writing. Conducting the research within a short timeframe was therefore difficult when dealing with a wide range of courses with different assignment deadlines.

Assessment regarding improvement in essay writing skill level was not possible given the short time-frame of this research. However, as discussed earlier, self-efficacy is linked to student performance and achievement so based on that, increased levels of confidence as self-reported by the participants could be seen as indicating increased future performance and achievement.

## 5. Findings

### 5.1 Qualitative Data

As discussed in the methodology section, qualitative data was analysed for recurring patterns and themes. Some themes naturally emerged from the research questions, for example participants were asked in interview about their use of academic supports, while other themes emerged through the general conversation in the interview, for example the issues students have with English language.

On completion of content analysis, six broad themes emerged: cultural differences, English language difficulties, academic supports, including online supports available to international Students, participants' experience of using the essay writing programme and confidence in essay writing and recommendation to other international students. Lesser themes identified included difficulties rating confidence, reasons for participating in the programme, expectations prior to using the programme, the best time to use the programme.

Profile of participants showed that three were in the 18-23 year age group with six being mature students over 23, the oldest being 40. Eight students were female and one was male. Students were at different years of study and studying in Trinity for various lengths of time from one semester to full degree courses. Participants were from all three faculties in Trinity College, studying a range of topics from English Literature to Medicine and Maths. Participants' nationalities were Austrian, Australian, Brazilian, Chinese (2), Italian, Singaporean (2), and Spanish. Two were native English speakers and seven spoke English as a second language.

From the researcher's perspective, some interesting aspects to the research, which emerged very early on, was the profile of participants with regard to courses being studied and prior experience of essay writing. The researcher's expectation was that participants would be mostly from the Faculty of AHSS as their in-course and examination assessments are almost all essay based whereas assessment in the other faculties tends to be a mixture of laboratory work and reports, MCQs, problem based learning assessments, group projects, clinical practice etc. It was therefore surprising to the researcher to find most of the participants were from the HS faculty with one participant from the Faculty of EMS. The HS students and the EMS student all stated that essay writing formed a small portion of their

course, however, because of that, they had little experience in essay writing and therefore wanted to learn about how to write effective essays. As one such participant said

‘ Exam is based on the medical side module...compared to the others (medical module) where you just learn it off but in the essay writing you need to go more in-depth in the reading material, there’s more in it’.(Participant E, Chinese, age 26)

There was also an expectation that they would have had no or very little experience of essay writing also proved incorrect as some students had done a lot of essay writing prior to participating in the research. Their rationale in participating in the research was to reassure themselves that what they were doing was correct. As one participant studying English literature said

‘It’s like when I’m given an essay I’m panicking but then it reminded me...it was like yes I can do these steps and I have done in the past so it was helpful.’(Participant B, age 22)

## 5.2 Themes

Based on the qualitative data analysis, the following themes emerged:

### 5.2.1 Theme 1 - Cultural Differences

As discussed in the literature review, Slethaug & Manjula (2012) found cultural differences in an academic environment can cause difficulties for international students. This research found this to be a significant difficulty for many of the participants. Participants felt that they were unsure of the expectations from lecturers regarding their essay assignments especially with regard to use of external evidence, referencing, structure of the essay and style of writing or expressing ideas, which was sometimes significantly different to what they were used to in their own countries.

Participant E, Chinese age 26, in 2<sup>nd</sup> year of a 4 year degree course said:

‘it’s the fluidity of writing skill, not just the grammar but the style of writing is very difficult.’

Participant C, Brazilian age 35 in 2<sup>nd</sup> year of a four year degree course said:

‘the other languages are very prosaic, they don’t go straight to the point and go into a lot of words, so the more loops and turn you make to explain a subject the better...I find it is a language problem for me because here you have to be concise and organise your ideas so it’s a big problem for me.’

Participant F, Italian, age 40 studying for one semester found

‘I think it’s a lot of a cultural thing like in Italian every time you talk about someone you use a different name...it’s a way to make it less boring but it makes it so much more complicated.’

Participant D, age 25 from Singapore thought

‘here put more thought into it but for ours (in Singapore) it was just throwing in content, here they think about what is more important in the topic so different to Singapore.’

A Spanish student doing one semester found that the emphasis on external sources rather than her own ideas was a significant difference and that in Spain ‘they weren’t as obsessed as here.’ While an Austrian student also studying for one semester found that having to write in the third person rather than using the pronoun I to express her ideas, quite a difficult idea to grasp.

Some students found the emphasis on critical thinking to be a significant difference;

Participant H, age 26 from Singapore doing 4<sup>th</sup> year at Trinity found that

‘Singapore more concerned about covering the points ... I learned more about critiquing articles in 4<sup>th</sup> year than in diploma in Singapore. We had to do literature review in Singapore but not in-depth until 4<sup>th</sup> year with Trinity, when we were taught how to do critical analysis. More critical analysis required in TCD’

While Participant A, Austrian, age 24 doing one semester said

‘because what stressed me out was that part about analysing and critical thinking because we usually, I don’t know if we are supposed to do that at home.’

### 5.2.2 Theme 2 - Language Problems

Studying and writing through English as a second language poses problems for many international students studying in western universities (Slethaug & Manjula 2012) while even students whose first language is English can have problems with use of expressions, colloquialisms etc. (Sheridan, 2011)

This research also found that many of the participants experienced language difficulties.

Participant D, Chinese, age 21 thought that

‘My English is not as good as English speaker so first important problem.’

While Participant E, age 26 also from Chinese found

‘They (the lecturers) just don’t get the way I write, cos of that English thing.’

Regarding lectures, Participant A from Austria, age 24 found

‘She (the lecturer) reads it and it can be quite fast and when you have to take notes it’s not so easy for me...with a literature lecture they are always mentioning authors and titles of books and dates and stuff so if you don’t see it in front of you it’s really hard to get the right name down especially with the Irish names. They are so hard.’

The consequences of these English language difficulties resulted in students having to work harder than native English speakers and finding that their grades were lower than their grades in their own country. Participant C from Brazil found that when she employed a proof-reader after getting consistent feedback about her grammar and sentence structure, her grades jumped from a 2.2 to a 1<sup>st</sup> which astounded her. As she said

‘It was so amazing, I had to pay someone to do it but that little change made a huge difference...I had the content down there and I understand the question but it was just my grammar was pulling me down all the time.’

### 5.2.3 Theme 3 - Academic supports

As discussed in the literature review, academic supports are important in supporting international students with their academic studies. Participants were therefore asked about their experience of the academic supports they were aware of or had tried. Trinity College provides a range of academic supports for the student population. However, none of them,

apart from the English for Academic Purposes, are specifically for international students. While most of the students were aware of some of the services, such as computer courses provided by the Library or various workshops provided by Student Learning Development, apart from one student, they were often not able to avail of these services because of clashes with their lecture schedules. As some participants explained:

‘I saw that (EAP programme) but cos I’m in practise ad we have shifts and we don’t have a set day, ...I couldn’t commit myself to come in and I didn’t have that day off...I think it would have been great if I could have been there but it’s not suitable to nursing.’ (Participant C, Brazilian, age 35)

‘I was planning to do the lectures but they were always at a time when I was not able to participate.’ So it would be nice to have online things so we could watch them at our own pace’ (Participant F, Italian age 40)

One participant found getting information about specific supports difficult:

‘In third year I decided that I need to check and I went to one of our tutors to ask about proof reading and what should I do but she didn’t have anybody so I went to the internet to find someone to see what I could do.’ (Participant C, Brazilian, age 35)

### **5.2.3.1 Online supports**

For students whose first language is not English, finding appropriate online supports can be a challenge. There is a lot of information available on the internet but finding appropriate material and discerning what is reliable and of good quality can be difficult.

‘I used YouTube asking for tips and something like that but it’s difficult cos you put in a search engine and you get pages and pages and then you open it up and it’s nothing to do with what you want so it’s a problem of the information era, you have all this information but it’s hard to select which ones are important and which ones are not’ (Participant F, Italian age 40)

‘I tried using it (TCD website) last year. It’s good but sometimes kind of confusing. It’s very long when you really just want a quick reminder. Reading all that abstract is just quite tiring.’ (Participant E, Chinese, age 26)

Even for English speakers, finding good quality information can be hard:

‘I look online for writing and referencing to check that I’m doing it right. They’re pretty good in terms of referencing they are pretty comprehensive. In terms of other things online resources can be touch and go, the quality can vary enormously from really basic things to kind of well produced things. Sometimes they can be too difficult to understand or not clearly explained like on YouTube, sometimes they can be complicated or a bit boring or not well explained.’(Participant B, age 22, Australian, Native English Speaker)

‘It’s not so easy to differentiate what is reliable and good information. Maybe I haven’t been searching the right way. ‘ (Participant H, Singapore, age 26, Native English Speaker)

#### **5.2.4 Theme 4 – Experiences of using the Essay Writing Programme**

Participants’ views of the Essay Writing Programme designed for this research study were very positive, with all participants stating that they would recommend it to other international students. Two participants had already recommended it to friends to assist with essay assignments. The main reasons for liking the programme were its ease of use and its simplicity. Aspects of the programmes such as the way the essay writing process was broken down into small steps with simple, clear, easy to understand language and use of examples to exemplify ideas such as how to plan your essay, develop an outline, construct a paragraph, how and why to reference sources correctly, etc. were mentioned as being particularly liked. The use of narration and text helped with understanding and accommodated preferences in learning styles.

‘Overall is a very good programme. Animated videos was interesting and easy to follow. Visually and audio the narration it’s good and the illustration by example, that’s good.’(Participant, H, Singapore, age 26)

‘easy access, easy to understand, good structure, clear, very well done.’(Participant A, Austria, age 24)

'I think having a lot of the examples really helped cos the videos broke down each example and explained how the example exemplified the thing it was talking about like first sentence of paragraphs. (Participant B, age 22, Australian)

'The format was really simple to use, really simple to read and simple to understand. I think that's the way it has to be cos then you just give up in the first thing if you can't understand and you just don't go ahead.'(Participant C, age 35, Brazilian)

As discussed in the technology design section, the constructivist aspect to this programme was an important consideration in its design allowing participants to actively construct their knowledge by putting what they had learned into practise. Participants confirmed that they found the essay writing template useful in starting to write and to build their essay in stages.

'I tried to use the template cos it's a good way to study to see what you know...so I was able to use it and it worked very well.' (Participant F, Italian, age 40)

'oh I really like the template cos it's really like...now you have to get to work and do something and in the end of every video reminding me that you have already done the outline and how you have to do the paragraphs or whatever and I was thinking oh I haven't done the outline yet so I must do it so that was very nice. The videos and the template were the main thing.' (Participant I, Spanish, age 22)

While the self-test section was generally viewed positively, as a way of testing what they had learned without a formal test, most of the participants found the activities difficult and made recommendations regarding how this section could be improved.

'When you do the activities at the end that was the hardest thing ever. I felt like oh my God, that was really hard...the tests should be graded so that you feel you're developing, that you're understanding, you're developing yourself.(Participant F, Italian age 40)

Other suggestions for improving the essay writing programme included incorporating sections of the essay writing template throughout the programme rather than having one template, improving the feedback for the self-test activities, incorporating more examples in



the videos. These will be considered by the researcher in terms of feasibility and effectiveness in improving the programme.

### 5.2.5 Theme 5 - Confidence

As discussed in the technology design section, increasing participants' self-efficacy, was a central feature of this research as it has been shown to lead to increased performance and achievement. In interview, self-efficacy was found to have increased by all of the participants after using the programme with some participants using the programme to reassure themselves that they were writing effectively while others wanted to learn how to write effectively.

'I was a little bit better cos I could see I was doing the right thing...so I was kind of reassured...I think it helped me a little bit more in my confidence.'(Participant C, Brzilian age 35)

'I'm sure this program helped me increase my confidence in essay writing. It was the first time that I studied English essay writing systematically. It answered a lot of questions that I had for academic English before. Thank you so much!' (Participant D, Chinese age 210)

'it helped me more confident about what I write.' (Participant F, Italian age 40)

I think my confidence is higher now because I was always scared about referencing but then I was reassured because of the videos.'(Participant A, Austrian age 24)

### 5.2.6 Theme 6 - Recommendation to other International Students

Participants were asked if they would recommend the essay writing programme to other international students. All participants answered yes and were generally enthusiastic in their reply.

‘Recommend? Oh yes I would , it will have a view of how essay writing is, breaks down different components and what is needed of each and then we wouldn’t have to fumble and be stressed out over the format and what is needed of each component . (Participant H, Singapore, age 26)

‘Yes of course, it helped me to sit down and start something cos it’s hard to start working on something especially if you’re scared.’ (Participant I, Spanish, age 22)

### 5.3 Quantitative Data

Because of the small number of participants and because the quantitative data was used to support the findings of the qualitative data and were thus not the main means of gathering data for this research, statistical analysis was done using manual numerical counts and percentages as opposed to using a specific statistical analysis software package.

Of the twelve participants who did the initial pre-essay writing programme questionnaire, nine completed the essay writing programme and post-programme questionnaire. There were thirteen questions with the highest score possible, answering ‘highly confident’ to all questions, being 120 (Appendix 14).

The purpose of the questionnaire was not to find the highest or lowest scoring participant but to find the difference between individual participants’ pre and post essay writing programme scores to see if the programme had an impact on participants’ confidence. So while one participant had the highest pre-EWP score of 109 and the highest post-EWP score of 110, this merely shows that they were quite confident at essay writing before using the programme with little change after it. What is more interesting is that most participants rated themselves as increasing in confidence after using the programme with four having increase in scores of between 48% and 5%. Three participants rated decreases in confidence scores of 2% which is not deemed to be significant (Table 3). Also, while these scores show how the participants rated themselves, the decreases were not borne out by the follow up

interviews with the students. Participant C, Brazilian, age 35 found the process of rating her confidence as a difficult one and said that

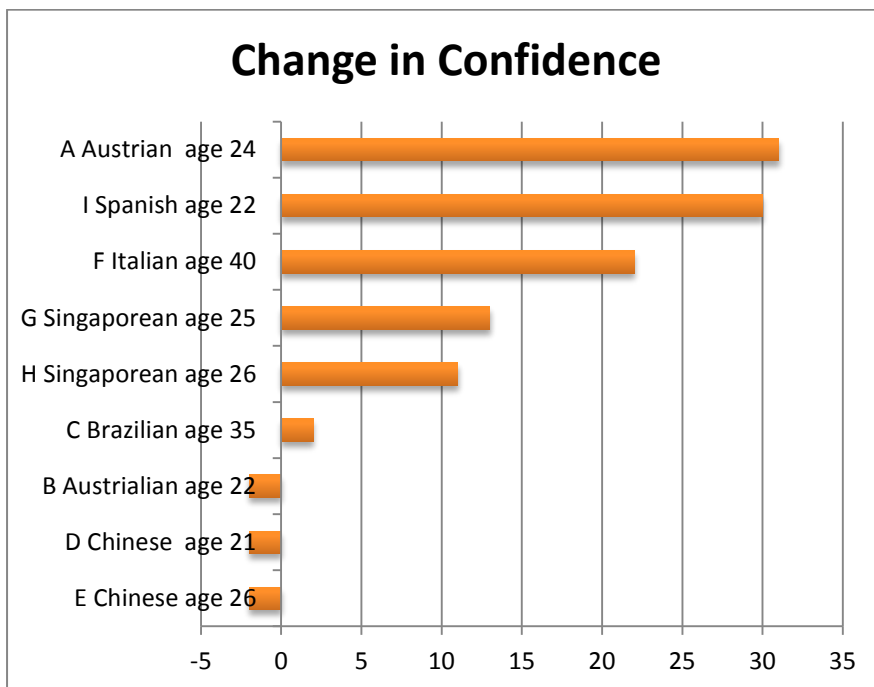
‘I will always be on the other side of zero than near the ten. I’m always saying I’m not doing this right.’

This student, however, also said in the interview that her confidence was

‘a little bit better cos I could see I was doing the right thing in the right ways...so I kind of reassured myself my skill developed a little bit more. I think it helped me a little bit more in my confidence.’

As all participants stated, in interview, that they felt their confidence had increased to some degree after using the programme, the confidence rating scores can be viewed as generally supporting the qualitative data findings that participants’ confidence did increase after using the programme, despite some decreases being recorded in the post-programme questionnaire.

Table 3 Comparison of Pre and Post Essay Writing Programme Scores



Pre and Post Essay Writing Scores and Changes in Confidence Scores				
	Pre Writing Programme Scores	Post Writing Programme Scores	Change in Confidence	% Change in Confidence
E Chinese age 26	58	56	-2	-3%
D Chinese age 21	100	98	-2	-2%
B Australian age 22	111	109	-2	-2%
C Brazilian age 35	40	42	2	5%
H Singaporean age 26	80	91	11	14%
G Singaporean age 25	60	73	13	22%
F Italian age 40	56	78	22	39%
I Spanish age 22	93	123	30	32%
A Austrian age 24	67	98	31	46%

The findings in this research show that, as previously mentioned in the literature review, international students do have problems adjusting to a new academic environment and need academic supports to help this adjustment. The participants of this study found that the specifically designed programme was easy to use and understand, in contrast with other online tools which are often difficult to find and understand and can give unreliable information. Furthermore, while workshops and face to face supports can be useful to international students, the students are often unable to avail of them due to time constraints and lecture schedules; hence having an online tool is of particular benefit.

The other issue that many international students face is the language problem which can cause difficulties with comprehension and means students often work at a slower pace and receive lower grades than they would at home. The essay writing programme was not able to help with issues regarding English language acquisition nor was it designed to do so. But there was an expectation of some of the students that it would help with English language issues and is therefore worth further investigation to see if an appropriate intervention could be developed.

The essay writing programme was found to be helpful in increasing participants' self-confidence in essay-writing which was a goal of the programme. However, one of the best endorsements for the success of the essay writing programme was that all participants said they would recommend it to other international students. Some also mentioned that they felt it would be better if students had access to it earlier in their studies e.g. in first year or at the beginning of the year or semester in the case of short-term students so that they could learn the skills earlier in their studies.

## 6. Conclusion

### 6.1 What this research claims

This research claims that international students need specifically designed academic support programmes that are available online. While many universities provide a range of academic supports such as academic workshops the problem with accessing workshops, as corroborated by this research, is that students often cannot attend due to their lecture schedule and whereas website and VLE supports are available all the time, students have found that they can be difficult to use, can be text heavy taking a long time to read and digest, and can be boring. Other online supports found through search engines bombard students with a huge amount of information leading to the difficulty of selecting appropriate material and discerning which is reliable and of good quality. This takes time for any student but for students studying through a second language, it can be a difficult task. This research found that specifically designed online supports for international students are therefore necessary to meet the academic needs of this student group.

As discussed in the literature review, essay writing is one area that international students often have difficulty with (Ferez 2005 cited in Sheridan 2011). Language difficulties such as grammar and sentence structure are the more obvious ones. But, even for students who speak English as their first language, writing styles can vary between countries and students are often unsure of the expectations around academic writing in a different country (Andrade 2006, Slethaug & Manjula 2012). These differences can result in increased stress, feelings of helplessness and anxiety (Sheridan, 2011). It is therefore important that international students learn the literary practices of their host institution. As this research found, international students want to learn how to write effectively in their new academic environment because grades depend to a greater or lesser extent on how well they can write essays.

## **6.2 Responses to the research question**

This research set out to investigate the impact of an online writing programme in increasing writing self-efficacy in international students and also questions regarding the need for and availability of specific academic supports for international students. This research found that a specifically designed programme did increase the self-confidence of the international students who used it. All participants were positive about the programme, finding it easy to use and facilitating a real-life practical application of new knowledge and skills. All participants would recommend it to other international students, with some believing it should be made available as early as possible in the student's course so as to be of maximum benefit. Additionally, the research found that international students struggle to attend academic skills workshops and seminars due to timetable clashes, find it difficult to find appropriate online supports, discern which are reliable and of good quality, or, in the case of students who are not native English speakers, find online supports can be text heavy, difficult and slow to use.

## **6.3 How this research advances the current state of the topic**

Despite research showing the benefits and need for specifically designed academic skills programmes for international students that are available when the students need them, few institutions have developed such programmes. The findings in this research corroborated both the need and benefits that such a programme can provide for international students.

How this research advanced the current state of the topic is in the constructivist element that was embedded in the programme. The research found that that having a constructivist element to the programme further assisted the students by helping them to apply their new knowledge in a practical and meaningful way. The participants in this research found the essay writing template to be helpful to them in transferring what they had learned in the instructional videos into actually organising and starting to write their essays. Whereas other online programmes provide instruction and sometimes interactive activities to test new knowledge, the researcher has not come across any other programme with this practical constructivist element embedded in it and as participants found this useful, it is therefore a new element in academic supports that is worth investigating through further research.

#### **6.4 Generalising the findings**

The findings in this research were valid in that they did show the impact of the essay writing programme on the confidence of these participants. However, as mentioned previously, because of the small number of participants it would be difficult to generalise the findings to the wider international student population in Trinity College. However, the research does give a good indication of the utility of a specifically designed teaching and learning tool in helping international students adjust to new academic environment and as such it points towards undertaking a larger piece of research on the topic with a larger sample size. As this research was specifically designed for Trinity College, even if the sample size were bigger, it would still not be possible to generalise to other Irish or international universities. This could only be achieved through a transnational research project working in collaboration with colleagues from other contexts.

#### **6.5 Limitations of the research**

As discussed in the methodology section, this research was limited by a number of constraints. Low participant numbers mean the findings are not reliable for the wider international student body in Trinity College. However, the positive outcome feedback from the participants is a good indication that the programme could be useful for the larger international student cohort. Additionally participants came from each faculty, were at different stages of their studies and some had extensive essay writing experience while others had little or none. It was therefore not possible to research a group from a similar course and with similar levels of essay writing experience which would have been interesting to research. Also, the essay writing programme was more suited to the Arts, Humanities and Social Sciences faculty whereas programmes written specifically each faculty could have had a greater impact on the confidence levels of those students. However, these students did say they felt more confident after using the programme as they learned about general principles of essay writing.

#### **6.6 Possible future directions for research in this area;**

The development of specifically designed online academic support programmes for international students is a relatively new area but one which is sure to develop as the numbers of international students increase yearly and universities become more aware of the need for these supports. While some institutions have developed specific supports,



none have been found to incorporate the opportunity for students to apply their new knowledge in a practical, real-life situation as afforded by the essay writing template in this research project. As this was viewed as positive by all participants, embedding the opportunity to apply newly learned skills or knowledge in teaching and learning tools could be worth researching on a larger scale.

One area the researcher would have liked to have explored was the use of social constructivism in developing academic skills in international students such as having peer writing groups which could be facilitated online. However, due to the limitations already mentioned e.g. students from different courses at different stages of their studies, this was not possible to carry out. It would however be an interesting research to undertake and could prove a useful way to develop a more sustainable academic support system for students in so far as it could require little in the way of staff resources to monitor it and could be largely student-led.

As mentioned in the literature review, some research points to the benefit of course-specific supports and is another area that could be explored further.

Finally, this was a small scale research study and while the results are valid in answering the questions it set out to answer, based on the positive outcomes produced, it would be useful to carry out further research in this area with a larger sample size to see if the findings could be generalised to the larger international student body in Trinity College or even nationally if a multi-institutional research project was undertaken.

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# Appendices

## Appendix 1 University of Adelaide Online Supports

The screenshot shows the University of Adelaide's 'English for Uni' website. The top navigation bar includes the university's name and logo, a search bar, and accessibility icons. The main header features 'English for Uni' and the university's crest. A left-hand navigation menu lists various topics, with 'Essay Writing' highlighted in a gold bar. Below this menu, the page title is 'Essay Writing' and the specific content is 'Ms Parrot: Essay Chef'. The text invites users to watch a video, try exercises, or download transcripts. A video player is embedded, showing three people in a kitchen setting. Below the video, there is a link to view the video on the Chinese site Youku. A section titled 'View the Individual Video Chapters' is also present. At the bottom, a brief definition of essays is provided.

The University of Adelaide

Search Website

English for Uni

THE UNIVERSITY of ADELAIDE

English for Uni / Essay Writing

### Essay Writing

#### Ms Parrot: Essay Chef

View the video, then try the [essay exercises](#) to test your knowledge! Watch the whole story, or see [sections of the story](#) below.

Download the [transcript](#) of the video or download the [exercises in pdf format](#) or as a [Word document](#).

Ms Parrot - Essay Chef (Full Version)

9, Redrafting


To view the video on the Chinese site youku please [click here](#).

► [View the Individual Video Chapters](#)

Essays help you discover more about a topic and write a reasoned analysis of the issues in question, using a range of external sources to support your position.

<https://www.adelaide.edu.au/english-for-uni/essay-writing/>

## Appendix 2 Monash University academic support



# Language and Learning Online

speaking reading listening writing grammar

Monash University > Learning Support > Language and Learning Online > Writing > General writing > Essay writing > Selecting readings > Skimming a text for relevance

HOME READING WRITING SPEAKING LISTENING STUDY SKILLS GRAMMAR QUICK STUDY GUIDES


### Table of contents

- Writing home
- General writing
  - Essay writing
    - What makes a good essay?
    - Essay topics
    - The essay plan
    - Selecting readings
      - Reading passages
      - Assessing a text's relevance
        - Skimming a text for relevance**
        - Taking notes from texts
        - Drafting the essay
        - Sample essay
        - Analysing citations
        - The conclusion
        - Essay references
      - Summary
      - Report writing
      - Writing literature reviews
      - Editing your thesis
      - Why do we reference?
      - Plagiarism
      - Academic writing
    - Writing in Art and Design
    - Writing in Arts
    - Writing in Business and Economics
    - Writing in Education
    - Writing in Engineering
    - Writing in Information Technology
    - Writing in Law
    - Writing in Medicine
    - Writing in Pharmacy
    - Writing in Science
  - Other writing resources
  - Assignment Builder

### Skimming a text for relevance

Another technique you can use to find out quickly if a text is going to be useful is to **skim read it** - that is to read over the text rapidly to get a general impression of its contents.

The following three short texts are broadly about the subject of divorce. Two of them however, are concerned specifically with the topic at hand - **explanations for rising divorce**.

 Skim read the texts and identify as quickly as you can the two 'explanations' texts. Think about the words or phrases in these texts that help you to make your judgements.

#### Text 1

Nicky Hart argues that the increasing divorce rate can be seen as a 'product of conflict between the changing economic system and its social and ideological superstructure (notably the family)'. In advanced capitalist industrial societies, there is an increasing demand for cheap female wage labour. Wives are encouraged to take up paid employment not only because of the demand for their services, but also because the capitalist controlled media has raised 'material aspirations' - the demand for goods that families desire. These material aspirations can only be satisfied by both spouses working as wage earners. However, conflict results from the contradiction between female wage labour and the normative expectations which surround married life. 'Working wives' are still expected to be primarily responsible for housework and raising children. In addition, they are still expected, to some degree, to play a subservient role to the male head of the household. These normative expectations contradict the wife's role as a wage earner since she is now sharing the economic burden with her husband. Conflict between the spouses can result from this contradiction, and conflict can lead to marital breakdown.

Haralambos, M. (1995) *Sociology, Themes and Perspectives*, 3rd edition. London: Bell and Hyman pp. 384-5.

Is this an 'explanation' text?  Yes  No

#### Text 2

If a couple decides to divorce, a number of major transitions of lifestyle and outlook have to be made. A series of interviews which Robert Weiss carried out with divorced men and women in the US showed a definite 'trajectory of divorce' (Weiss, 1976). Women suffer from a divorce far more than men on an economic level, but the process of psychological and social adjustment seems similar for both sexes. In the majority of instances Weiss studied, the respect and liking a couple may have felt for one another disappears some while before they separate. At the same time, a sense of being bound emotionally to the other person persists. Thus even though a couple may row bitterly just before parting, they tend to experience what Weiss calls *separation distress*. The sudden absence of the spouse creates feelings of anxiety and panic. A minority of individuals however have an opposite experience - a feeling of euphoria in response to being free and able to deal with their lives on their own.

Giddens, A. (1989) *Sociology*, Oxford: Basil Blackwell, pp. 364-5

<http://monash.edu/lls/llonline/writing/general/essay/selected-readings/3.xml>



### Appendix 3 Pros and Cons of technological tools needs to be finished

Technology Type	Pros	Cons
VLE - Blackboard	<ul style="list-style-type: none"> <li>• Available to all students</li> <li>• Students used to using it</li> <li>• Can be accessed anytime</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to set up anonymous groups</li> <li>• Design is old fashioned</li> <li>• Not easy to design user friendly questionnaires</li> <li>• Not easy to embed external forms or questionnaires</li> </ul>
Website	<ul style="list-style-type: none"> <li>• One platform can host variety of materials</li> <li>• Easy to access from PC, Mac, smart phones</li> <li>• Flexible design features</li> <li>• Modern, user friendly</li> <li>• Can embed forms add links, host videos</li> <li>• Anytime feature</li> </ul>	<ul style="list-style-type: none"> <li>• Time involved for researcher in designing and setting up blog</li> <li>• Issues with controlling access to unregistered students</li> <li>•</li> </ul>
Survey Monkey for all information gathering	<ul style="list-style-type: none"> <li>• Researcher has access to professional level Survey Monkey</li> <li>• Questionnaires can be designed that collect, collate and analyse data</li> <li>• Can be accessed anytime</li> </ul>	<ul style="list-style-type: none"> <li>• Only certain types of forms can be designed eg ones that need data for analysis,</li> <li>• Needs a platform to be delivered from eg a link in an email or on a blog or in a VLE</li> </ul>
Hard copy questionnaire	<ul style="list-style-type: none"> <li>• Easy for participants to fill in</li> </ul>	<ul style="list-style-type: none"> <li>• Difficult to distribute to participants who are from different courses</li> <li>• Data would have to be manually collated and analysed</li> <li>• More work involved in collecting the questionnaires</li> <li>• Higher cost than online version</li> </ul>
GLO Maker	<ul style="list-style-type: none"> <li>• Easy to use</li> <li>• Nice interactive activities</li> <li>• Designed for adult learners</li> <li>• Free</li> </ul>	<ul style="list-style-type: none"> <li>• Difficulties with running the programme when embedded in Blackboard</li> <li>• Resulted in only using GLO Maker for some parts of the programme rather than hosting all aspects of the programme</li> </ul>
Articulate	<ul style="list-style-type: none"> <li>• Range of features for designing interactive online learning activities</li> </ul>	<ul style="list-style-type: none"> <li>• Cost – 1300euros</li> </ul>
Camtasia	<ul style="list-style-type: none"> <li>• Easy to edit videos and add narration</li> </ul>	<ul style="list-style-type: none"> <li>• Available to researcher</li> <li>• Researcher knows how to use it</li> </ul>
PowToon	<ul style="list-style-type: none"> <li>• Easy to use</li> <li>• Creates videos suitable</li> </ul>	<ul style="list-style-type: none"> <li>• Needs to be downloaded and edited using additional software to improve</li> </ul>



	<p>for adults</p> <ul style="list-style-type: none"> <li>• Free</li> <li>• Good range of templates, backgrounds and characters</li> <li>• Can make videos relatively quickly</li> </ul>	<p>quality</p> <ul style="list-style-type: none"> <li>• Needs to be converted to MP4 format using additional software for embedding on Blackboard</li> </ul>
Muvizoo	<ul style="list-style-type: none"> <li>• Makes 3d animated videos</li> <li>• Free</li> <li>• Good graphics</li> </ul>	<ul style="list-style-type: none"> <li>• Audio cannot be edited, needs to be done in one go</li> <li>• Researcher found it difficult to learn and took a long time to make even very short videos</li> </ul>
Adobe Forms	<ul style="list-style-type: none"> <li>• Free</li> <li>• Interactive</li> <li>• Can be opened on most computers, devices</li> </ul>	<ul style="list-style-type: none"> <li>• No wraparound facility means text can only be seen in a small portion at one time. Paragraphs or long sentences cannot be viewed in their entirety.</li> </ul>
Google Docs	<ul style="list-style-type: none"> <li>• Easy for researcher to set up</li> <li>• Flexible regarding formats available</li> </ul>	<ul style="list-style-type: none"> <li>• Cannot be downloaded on to participants computers so they cannot take ownership</li> <li>• All students do not have a google account or know how to use Google Docs</li> </ul>

#### Appendix 4 Table of Mayer's Instructional Design Principles

<b>Principle</b>	<b>Explanation – People learn better when</b>
Multimedia Principle	Words and pictures are used rather than words alone
Pre-training Principle	Key concepts are presented before a lesson
Modality Principle	Spoken words are used rather than printed words
Segmenting Principle	A lesson is broken down into shorter component parts rather than one continuous lesson
Coherence Principle	Irrelevant material is excluded
Signaling Principle	Essential material is highlighted
Redundancy Principle	Both narration and text are not used with graphics. Narration and graphics alone are better than narration, text and graphics
Spatial contiguity Principle	Text and appropriate graphics are placed adjacently to each other rather than in different parts of the screen
Temporal contiguity Principle	Word and graphics are presented simultaneously
Personalization principle:	Words are in an informal rather than formal style
Voice Principle:	Narration is in human voice rather than mechanical
Embodiment Principle	Images should have human like gestures
Image Principle:	Static images are not necessarily better than no image

## Appendix 5 Participant Recruitment Flyer



Are you an international student in Trinity College?

Are you struggling withessay writing?

If so, you might be interested in an online essay writing tool that will help you to develop your essay writing skills. This tool is being developed for International Students in Trinity College as part of a research project.

The programme will show you how to write an essay with easy to follow short animated videos. It takes about an hour to complete and you will start to write your own essay as you go through the programme. You can use the programme at your own pace from anywhere.

I am looking for International Students to take part in the research, by using the online programme and then attending for an interview afterwards to give feedback of their experience.

If you would like to participate and learn how to write an essay, please **email** Caroline at [forsytc@tcd.ie](mailto:forsytc@tcd.ie).

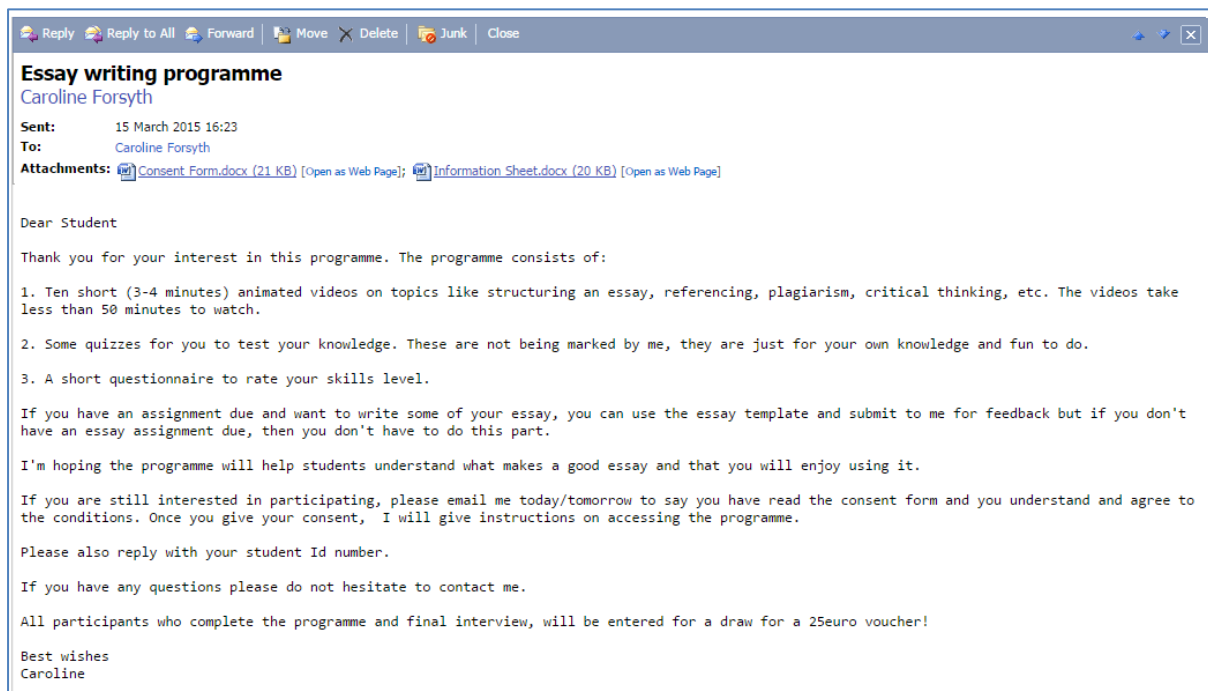
Participants will also be entered into a draw for a **25euro voucher**.

Thank you

Caroline Forsyth

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## Appendix 6 Follow up recruitment email



## Appendix 7 Participant Information Sheet

### TRINITY COLLEGE DUBLIN INFORMATION SHEET FOR PARTICIPANTS

The background context of the research explaining its relevance

- International students face issues that are not faced by local students. These include problems arising from differences in communication styles, communicating through English, different academic culture and different expectations regarding the students' level of independent learning. (Slethaug and Manjula, 2012).
- While Trinity College runs orientation programmes for international students during which the students are given information regarding various services they can avail of, these are generally one-off information sessions held in large lecture theatres with 300+ students and do not address the questions students have around what is expected of them from an academic point of view. There is also the issue of students who can't attend these sessions missing out on the information
- This research study aims to develop an instructional interactive technological tool which will help international students to learn the skills they require for essay writing, one of the key academic features of assessment for undergraduates. The tool will be accessible to the students through Trinity College's Blackboard, for anytime anywhere use.

The procedures relevant to the participant within this particular study

- This study will take place over three weeks but students can complete the programme at their own pace within that timeframe. Once students have read the information sheet and consent form, they can either contact the researcher by phone or email or meet face-to-face to discuss any questions or concerns they have prior to participating in the study. Participants must have read the information sheet and agreed to the terms in the consent form before they can participate in the study. Participants will do an initial pre-study short survey regarding their essay writing skills. The essay writing programme will start by asking participants to reflect on their current academic skills. Participants will then be able to access a number of instructional animated videos, each one concentrating on a particular aspect of essay writing. During the videos, there will be some prompts to students to start developing their own essay using the interactive word document essay writing template. There will then be a section for participants to test their new knowledge using fun, interactive activities. Finally, participants will re-take the initial survey regarding their essay writing skills.
- On completion of the study, participants will engage in a semi-structured interview with the researcher regarding the participant's experience of using the programme and their view of its efficacy in helping them develop essay writing skills for their studies at Trinity College.

- All information will be anonymised for the final report. No identifying information will be used. Participants can withdraw from the study at any stage of the proceedings without penalty.

#### Declarations of conflicts of interest

- There are no conflicts of interest. Participants are recruited through transparent methods and will be selected randomly from those students that apply and that meet the criteria.
- The voluntary nature of participation: the right to withdraw and to omit individual responses without penalty
- Participants freely and voluntarily agree to be part of this research study, though without prejudice to their legal and ethical rights. Participants may refuse to answer any question and may withdraw at any time without penalty.
- The expected duration of the participant's involvement  
Participants will be expected to participate in the study for a period not exceeding two weeks.
- Anticipated risks/benefits to the participant  
There are no anticipated risks to the participant.
- The provisions for debriefing after participation  
Participants can participate in a debriefing session with the researcher after the study if they wish to do so.
- Preservation of participant and third-party anonymity in analysis, publication and presentation of resulting data and findings  
Participants' personal details will not be disclosed in the analysis, publication and presentation of resulting data and findings. Anonymity will be maintained for these.
- Cautions about inadvertent discovery of illicit activities  
If participants make illicit activities known, these will be reported to appropriate authorities.
- Provision for verifying direct quotations and their contextual appropriateness  
The researcher will keep a record of participants' material for the purpose of verification of direct quotations and their contextual appropriateness. This will be stored confidentially in a secure location.

## Appendix 8 Participant Consent Form

### TRINITY COLLEGE DUBLIN INFORMED CONSENT FORM

**LEAD RESEARCHER:** Caroline Forsyth

**BACKGROUND OF RESEARCH:**

International students face issues that are not faced by local students. These include problems arising from differences in communication styles, communicating through English, different academic culture and different expectations regarding the students' level of independent learning. (Slethaug and Manjula, 2012).

While Trinity College runs orientation programmes for international students during which the students are given information regarding various services they can avail of, these are generally one-off information sessions held in large lecture theatres with 300+ students and do not address the questions students have around what is expected of them from an academic point of view. There is also the issue of students who can't attend these sessions missing out on the information

This research study aims to develop an instructional interactive technological tool which will help international students to learn the skills they require for essay writing, one of the key academic features of assessment for undergraduates. The tool will be accessible to the students through Trinity College's Blackboard, for anytime anywhere use.

**PROCEDURES OF THIS STUDY:** This study will take place over one week but students can complete the programme at their own pace within that timeframe. Once students have read the information sheet and consent form, they can either contact the researcher by phone or email or meet face-to-face to discuss any questions or concerns they have prior to participating in the study. Participants must have read the information sheet and agreed to the terms in the consent form before they can participate in the study. Participants will do an initial pre-study short survey regarding their essay writing skills. The essay writing programme will start by asking participants to reflect on their current academic skills. Participants will then be able to access a number of instructional animated videos, each one concentrating on a particular aspect of essay writing. During the videos, there will be some prompts to students to start developing their own essay using the interactive word document essay writing template. There will then be a section for participants to test their new knowledge using fun, interactive activities. Finally, participants will re-take the initial survey regarding their essay writing skills.

On completion of the study, participants will engage in a semi-structured interview with the researcher regarding the participant's experience of using the programme and their view of its efficacy in helping them develop essay writing skills for their studies at Trinity College.

All information will be anonymised for the final report. No identifying information will be used. Participants can withdraw from the study at any stage of the proceedings without penalty.

**PUBLICATION:** The research study will be submitted to an examination panel in the School of Computer Science and Statistics as part of an MSc in Technology and Learning. Individual results will be aggregated anonymously and research reported on aggregate results.

**DECLARATION:**

- I am 18 years or older and am competent to provide consent.
- I have read, or had read to me, a document providing information about this research and this consent form. I have had the opportunity to ask questions and all my questions have been answered to my satisfaction and understand the description of the research that is being provided to me.
- I agree that my data is used for scientific purposes and I have no objection that my data is published in scientific publications in a way that does not reveal my identity.
- I understand that if I make illicit activities known, these will be reported to appropriate authorities.
- I freely and voluntarily agree to be part of this research study, though without prejudice to my legal and ethical rights.
- I understand that I may refuse to answer any question and that I may withdraw at any time without penalty.
- I understand that my participation is fully anonymous and that no personal details about me will be recorded.
- I understand the researcher will keep a record of my materials for the purpose of verification of direct quotations and their contextual appropriateness. These will be stored confidentially in a secure location.
- I understand that if I or anyone in my family has a history of epilepsy then I am proceeding at my own risk.
- I have received a copy of this agreement.

**PARTICIPANT'S NAME:**

**PARTICIPANT'S SIGNATURE:**

**Date:**

**Statement of investigator's responsibility:** I have explained the nature and purpose of this research study, the procedures to be undertaken and any risks that may be involved. I have offered to answer any questions and fully answered such questions. I believe that the participant understands my explanation and has freely given informed consent.

**RESEARCHERS CONTACT DETAILS:** Caroline Forsyth. Email: [forsytc@tcd.ie](mailto:forsytc@tcd.ie), Mobile: 087 7475140

**INVESTIGATOR'S SIGNATURE: Date:**



## Appendix 9 Ethics Approval

You replied to this message on 12/11/2014 1:52 PM.

From: Sara Gutierrez Llaneza <Sara.Gutierrez@scse.tcd.ie>  
To: Caroline Forsyth  
Cc: 'Research Ethics'  
Subject: FW: Research Ethics Approval Application

Sent: Thu 12/11/2014 1:14 PM

Message: Research Proposal.docx (34 KB)  
Ethics Approval Application - Caroline Forsyth-MSc in Technology and Learning Nov 2014.docx (85 KB)

Dear Caroline,

Many thanks for this revision. The Research Ethics Committee have reviewed and approved your application.  
You may proceed with this study.

We wish you success in your research.

Regards,  
Sara

## Appendix 10 Instructions for doing pre-programme questionnaire

Dear ?

Thanks for your reply and for your interest in the programme.

Before starting the programme, would you mind completing the questionnaire on how you feel about your current essay writing skills by clicking on the link <https://www.surveymonkey.com/s/essaywriting>.

Once you have done the questionnaire I'll enrol you on the programme.

Thank you

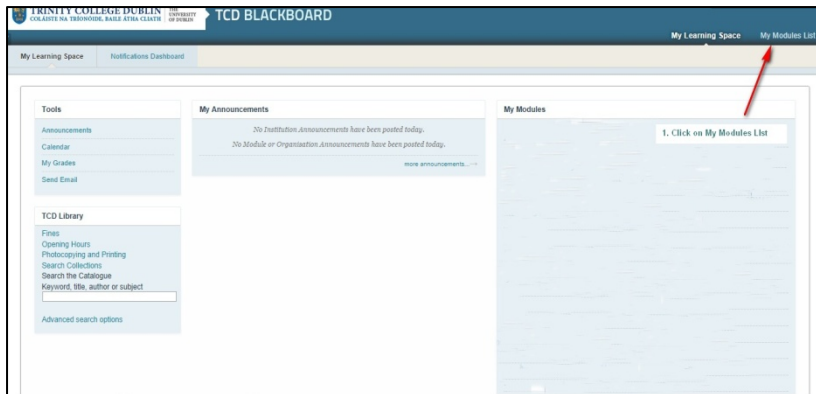
Best wishes  
Caroline

## Appendix 11 Sample of Likert confidence questionnaire

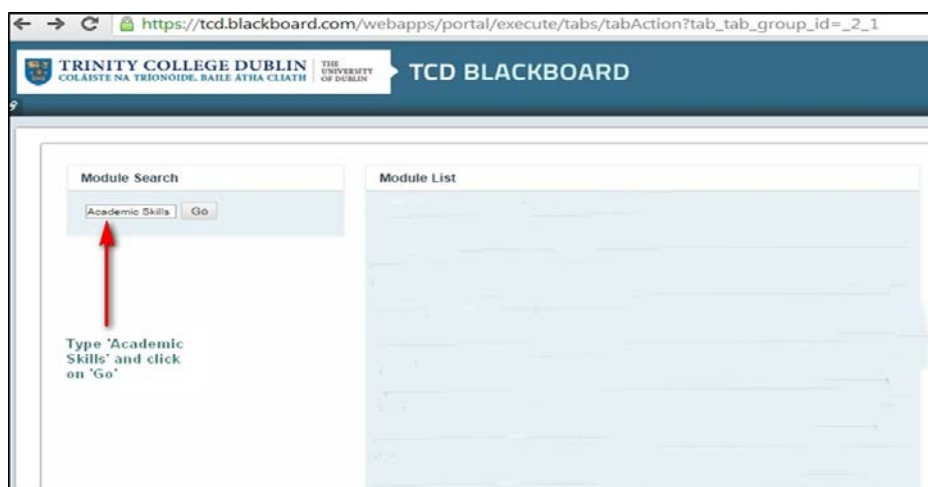
<b>8. I can plan the different parts of writing an essay so that I complete it on time.</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>9. I can structure an essay so that has a logical flow and is coherent</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>10. I can do an essay outline to help structure my essay</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>11. I can write well in English</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>12. I can reference in the correct style</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>13. I can reference appropriately i.e. I know what has to be referenced</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>14. I can avoid plagiarism</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<b>15. I can analyse and evaluate secondary source information to use in my essay</b>									
1 Not at all confident	2	3	4	5 Moderately confident	6	7	8	9	10 Highly Confident
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Appendix 12 Instructions for enrolling on Essay Writing Programme

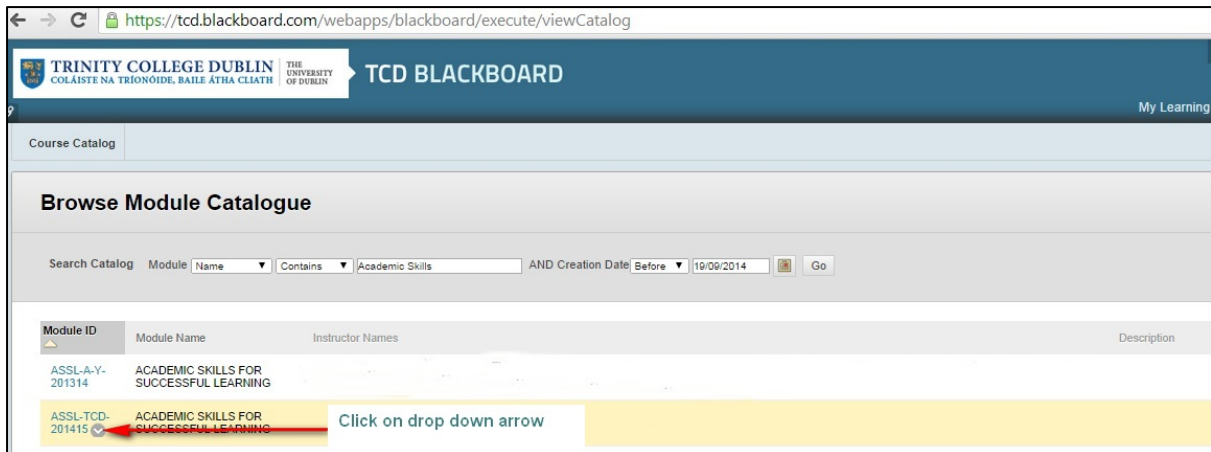
1. Log on to your Blackboard Module
2. Click on 'My Modules List'



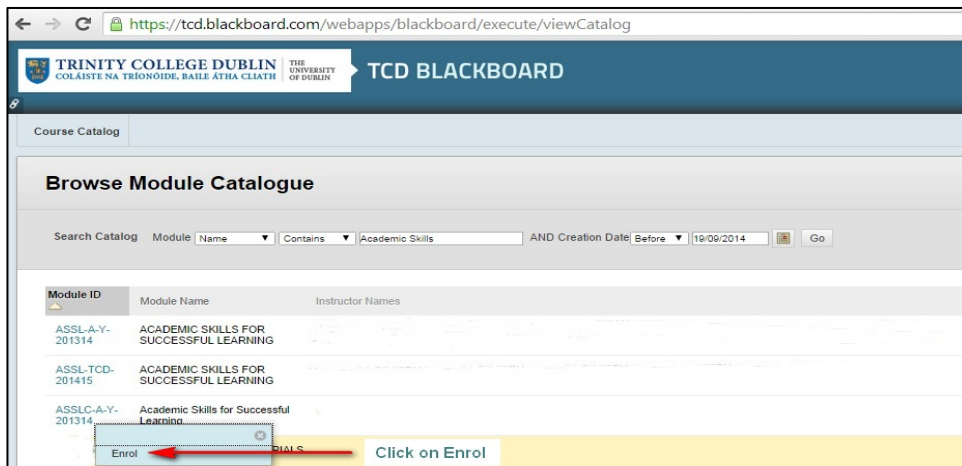
3. Type 'Academic Skills' in the Module Search box and click on 'Go'



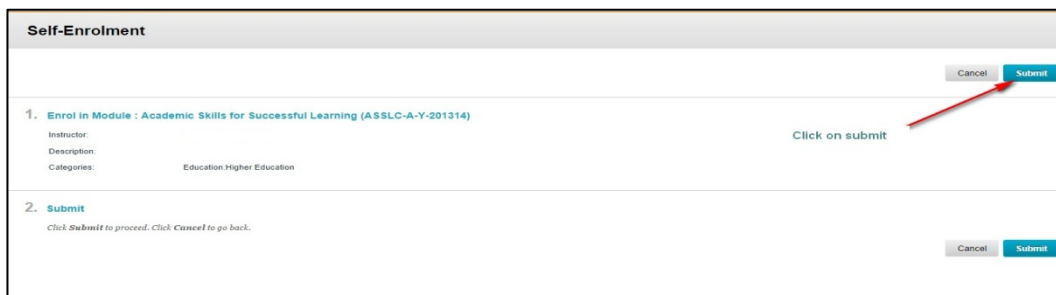
4. If a number of modules appear, hover your mouse over one titled 'ASSL-TCD-201415'. Click on the drop-down arrow that appears.



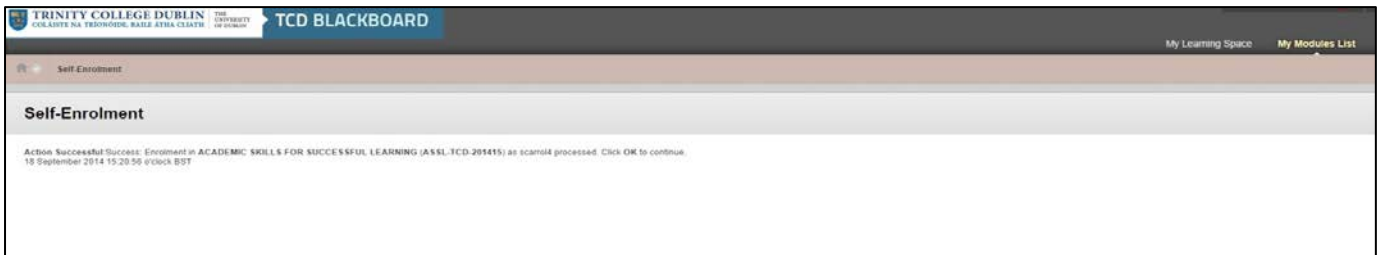
5. Click on 'Enrol'



6. Click on 'Submit'



7. You will get a message to say you have been successful



8. Click on link on the left hand menu called 'Essay Writing for International Students'



## Appendix 13 Semi-structured Interview Schedule

Each question is optional. Please feel free not to answer any question you don't want to; however I would be grateful if all questions are responded to.

Student Id number:

Male/Female:

1. Age – 18-23 23+
2. Did you have a career prior to coming to study?
3. What is your Nationality?
4. Are you Undergraduate/Postgraduate?
5. What is the Total length of time you will spend studying at Trinity College e.g 4 year degree, 1 term, 1 academic year
6. What is your current year of study at Trinity College: 1<sup>st</sup> year, 2<sup>nd</sup> year
7. What are you studying?
8. To what extent is essay writing a part of your course?
9. Why are you studying at 3<sup>rd</sup> level?
10. Why did you choose Trinity College?
11. How did you feel when you were asked to write an essay
12. What, if any academic supports are you aware of that are available to you in Trinity College?
13. 12. What experience of essay writing did you have before you came to Trinity?
14. What was your experience of using the essay writing programme? (ease of access, ease of use, technical skills required, resources provided, content, which section was most useful, what did you think of the reflection section, the video format, the self-test questions)
15. What type of programme were you expecting when you joined this research project? Did this meet your expectations?
16. How useful was the essay writing programme in helping you to develop the skills you needed for essay writing?
17. Do you think your skills have developed since using the programme?
18. If yes, can you explain how they have developed?
19. Has there been any change in your confidence in essay writing?
20. If yes, can you explain what that change is?
21. Do you have any recommendations on improving the programme? What would you like to see added to/deleted from the programme?
22. Would you recommend the programme to other International students?
23. What other difficulties do you have regarding your studies at Trinity?
24. Have you any other suggestions regarding how International Students can be better supported in their studies at Trinity College?

## Appendix 14 Results of Self-Confidence Rating Questionnaire

Results of Pre and Post Essay Writing Programme self-confidence scores and Change in Confidence																		
	I can plan the different parts of writing an essay so that I complete it on time.	I can structure an essay so that has a logical flow and is coherent	I can do an essay outline to help structure my essay	I can write well in English	I can reference in the correct style	I can reference appropriately i.e. I know what has to be referenced	I can avoid plagiarism	I can analyse and evaluate secondary source information to use in my essay	I can read and write in a critical manner	I can analyse the topic so that I know what I am writing about	I can write an essay I am happy with	I can write in the appropriate academic style	I can write well-structured paragraphs	Now add up your scores and put your final score in the box below.	Scores corrected using Excel	Date	Change in confidence	% Change in confidence
Brazilian	5	2	5	2	3	5	5	4	2	4	1	1	1	50	40	2-Mar		
	5	4	4	1	4	4	5	4	3	5	1	1	1	42	42	12-Mar	2	5%
Singapore	4	5	4	7	4	4	5	4	4	5	4	5	5	64	60	2-Mar		
	6	6	6	6	6	5	5	5	5	6	5	6	6	79	73	9-Mar	13	22%
Chinese	5	4	5	4	5	5	5	4	4	4	5	4	4	58	58	4-Mar		
	5	5	5	4	3	4	5	3	4	5	5	4	4	52	56	18-Mar	-2	-3%
Singapore	5	6	5	6	8	7	7	7	5	5	6	6	7	70	80	12-Mar		
	6	7	6	7	8	8	8	7	7	6	6	7	8	91	91	20-Mar	11	14%
Italian	5	3	3	2	4	5	8	7	5	5	5	3	1	56	56	6-Mar		
	5	7	7	3	10	10	10	5	4	6	5	3	3	83	78	19-Mar	22	39%
Spanish	7	8	9	7	1	7	9	8	9	7	6	7	8	93	93	2-Mar		
	8	9	10	9	10	9	10	9	10	10	9	10	10	123	123	20-Mar	30	32%
Austrian	8	4	7	7	3	5	6	6	3	4	5	4	5	67	67	2-Mar		
	6	8	8	7	8	9	9	7	6	7	7	8	8	98	98	6-Mar	31	46%
Australian	5	9	9	10	10	9	9	9	9	8	6	9	9	111	111	13-Mar		
	3	8	8	10	10	10	9	9	9	9	5	10	9	109	109	20-Mar	-2	-2%
Chinese	5	10	10	4	9	8	9	7	7	6	9	7	9	98	100	3-Mar		
	5	8	10	6	8	5	7	5	9	10	10	8	7	102	98	20-Mar	-2	-2%