

Exploring the experience of high-ability students from socio-economic disadvantaged schools participating in a summer academic programme

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Declaration of Work

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

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List of Abbreviations

CAA	Centre for Academic Achievement
CAT	Centre for Academic Talent
CSO	Central Statistics Office
CTD	Center of Talent Development, Northwestern University
CTY	Center of Talented Youth, Johns Hopkins
CTYI	Centre for Talented Youth, Ireland
DEIS	Delivering Equality of Opportunity in Schools
DES	Department of Education and Skills
DCU	Dublin City University
ERC	Educational Research Centre
ESRI	The Economic and Social Research Institute
GC	Guidance Counsellor
HEA	Higher Education Authority
HEAR	Higher Education Access Route
HEI	Higher Education Institutions
NAGC	National Association for Gifted Children
NCCA	National Council for Curriculum and Assessment
OECD	Organisation for Economic Co-operation and Development
PSAT	Preliminary Scholastic Aptitude Test
QL	Qualitative

SS

Summer Scholars

STEM

Science, Technology, Engineering & Maths

UYP

University for Young People

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Thesis Note

No singular definition or term exists as to what or who characterise 'the gifted'. A number of terms will be used throughout this thesis depending on their relevance and previous application within a given context. These terms include; 'gifted', 'exceptionally able', and 'high-ability'.

The term 'high-ability' will be used most frequently throughout the various chapters of this thesis as it is the term most often used when referring to students from low-income families who are capable of high levels of achievement.

Thesis Abstract

Exploring the experience of high-ability students from socio-economic disadvantaged schools participating in a summer academic programme

Eileen Elizabeth Breslin

This thesis focuses on exploring the experience of student participants' in the Aiming High initiative. This initiative was launched in 2010 by the Centre of Talented Youth, Ireland (CTYI) in order to address the under-representation of high-ability second-level students from low-income families within CTYI's older student summer programmes.

The need for this programme, and in turn, for such research developed out of an awareness regarding the under-representation of students from areas of disadvantage within programmes focusing on the development of academic talent at CTYI (and within the field of gifted education). In addition, there was a general perception that these young people are less likely to take part in higher education upon completion of their secondary school studies.

The study applies a qualitative case study methodology and uses of a number of research methods, (questionnaires, interviews, & focus groups) with different sets of research participants (students, parents & schools) and across a number of years (2011-2014). The research findings indicate four key themes; academic, social, and personal benefits together with a small number of negative consequences. This case addresses a deficit in the literature which calls for strategies focusing on the talent development of high-ability, low-income students through the presentation of a detailed description of this innovative programme. The findings from this case study provide important lessons about this population of students which may provide readers with valuable insights should the programme be replicated in the future.

Chapter 1- Introduction

1.1 Chapter Introduction

This chapter aims to introduce this research study. The study being presented concentrates on describing and exploring the experiences of students' who have taken part in the Aiming High initiative which was launched by the Centre of Talented Youth, Ireland (CTYI) in 2010. This innovative programme was created in order to target high-ability second-level students from socio-economic disadvantaged schools within North Dublin in order to develop their academic abilities.

This chapter will introduce a number of key areas which aim to lay the foundation for the thesis itself. The chapter will start with an overview of the current provision (or lack thereof) for high-ability students within the Irish education system and within Irish legislation. This will lead on to an analysis of the need for an organisation such as CTYI to provide these students with an outlet to develop their academic talents. The research topic will then be explored from two perspectives. Firstly, from the perspective of the under-representation of students from areas of disadvantage within academic programmes and secondly, addressing the reality of how students from these communities are also less likely than students from higher socio-economic groups to participate in higher education. With the rationale of the study set, the Aiming High initiative will be introduced and explained. The significance of the research study will also be outlined before the research aims and questions are identified. Finally, a synopsis of the thesis will conclude the chapter. With the various sections combined, this chapter will put forward the essential background material necessary to frame the study.

Throughout this thesis, each chapter shall contain a visual overview of the various components which will be covered throughout the corresponding chapter. Figure 1.1 provides an overview of the areas to be covered throughout the introduction.

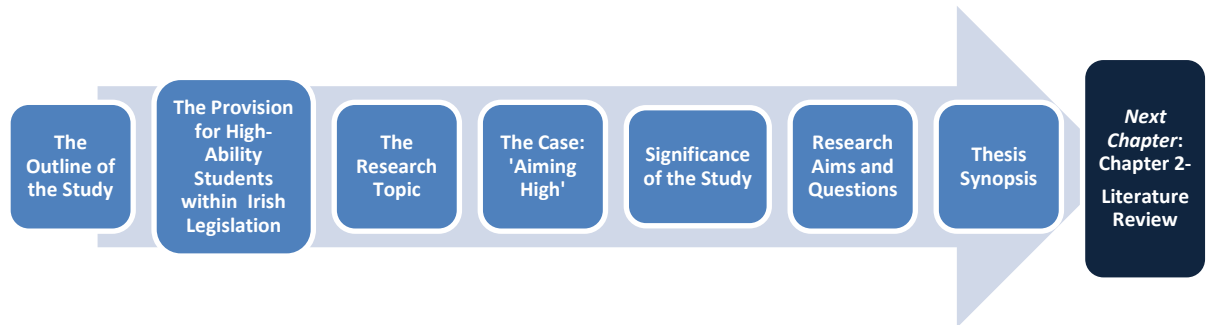


Figure 1.1 Structure of Introduction Chapter

1.2. Outlining the study

This research study which was commissioned by CTYI focuses on the Aiming High initiative which was set up in order to address the under-representation of students within CTYI's programmes from the socio-economic disadvantaged schools in the region surrounding the Dublin City University (DCU) campus. The Aiming High programme gives second-level students (aged between 13-17 years) from the disadvantaged schools around North Dublin the opportunity to participate in an assessment with CTYI and subsequently, a summer programme within DCU for a heavily subsidised fee. Before specific detail is given about the Aiming High initiative, we shall first consider the current provision for high-ability students within Irish legislation.

1.3. The Provision for High-Ability Students within Irish Legislation

Before introducing the research topic itself, it is important to outline the current provisions for high-ability students within the Irish legislation. Within Irish legal and educational policy publications, the terms 'high-ability' or 'gifted' are not used, instead,

the term 'exceptionally able' is applied. The first definition of 'exceptionally able' students was first put forward by the Special Education Review Committee in 1993.

The definition classifies "exceptionally able students" as;

"...those who have demonstrated their capacity to achieve high performance in one or more of the following areas; general intellectual ability, specific academic aptitude, creative or productive thinking, leadership ability, visual and performing arts, mechanical aptitude and psychomotor ability" (Department of Education and Science, 1993, p.160).

Since 1993, this definition has been revised¹, and these revisions will be returned to in the next chapter. Nonetheless, at this point, such a definition is needed in order to provide some context in relation to the landscape of high-ability (*or exceptionally able*) students within Ireland prior to the passing of the Education Act, 1998.

1.3.1. The Education Act, 1998

The enactment of the Education Act in 1998 (The Act of 1998) is a significant piece of legislation as it provided for the first time, "...a statutory duty on the government in power to ensure that appropriate education and support services are available to everyone in the country" (O'Reilly, 2012, p.100). The Act of 1998 provides generally for primary, post-primary, adult, continuing education, while also providing for those with a disability or other special educational needs.

In the Act of 1998, under s 2 (1), "special educational needs" are defined as follows;

"(means) the educational needs of students who have a disability *and the educational needs of exceptionally able students*²;" (emphasis added)

¹ The definition was revised by the National Council for Curriculum and Assessment (NCCA) in 2007.

² "Student"- in relation to a school, means a person enrolled at the school and in relation to a centre for education, means a person registered as a student in that centre." (Education Act, 1998 s. 2 (1))

In a later section of the 1998 Act, s 7 (1) (a), it provides that;

“to ensure, subject to the provisions of the Act, that there is made available to each person resident in the State, including a person with a disability or who has other *special educational needs, support services and a level and quality of education appropriate to meeting the needs and ability of that person,*”.(emphasis added)

The publication of the Act of 1998 led to an increased call for the area of special needs to be addressed (O’Reilly, 2012). Consequently, the Education for Persons with Special Educational Needs Act (ESPEN) (The Act of 2004) was enacted in 2004;

“The Act of 2004 provides the statutory requirements and basic framework for educational planning and the delivery of educational services to people with special educational needs.” (Glennendenning, 2012, p.237)

The Act of 2004, s 52, substitutes a new definition of ‘disability’ in the Act of 1998;

“‘disability means, in relation to a person, a restriction in the capacity of the person to participate in and benefit from the education on account of an enduring physical, sensory, mental health or learning disability, or any other condition which results in a person learning differently from a person without that condition and cognate words shall be construed accordingly;”

The effect of this amendment is that the term ‘disability’ is the same in both the Act of 1998 and the Act of 2004. However, and significantly, although ‘disability’ and ‘special educational needs’ have the same meaning in the Act of 2004, “they are not coterminous in the Act of 1998 since...‘the educational needs of exceptionally able students’ is retained in the Act of 1998.” (Glennendenning, 2012; p.279)

Despite there being no definition provided for ‘exceptionally able students’ in the Act of 1998; it can be argued that such students have statutory entitlements under the Act of 1998;

“...if such students have a ‘disability’ under the amended term in the Act of 1998, then they have ‘special educational needs’ under the Act of 2004 since both terms are synonymous under the latter Act (Glennendenning, 2012, p.280)

The National Council for Curriculum and Assessment (NCCA) is a statutory body established under the Act of 1998 to advise the Minister for Education and Skills on curriculum and assessment for early childhood education and for primary and post-primary schools. Interestingly, the NCCA states on its website that “students who are classified as ‘exceptionably able’ belong on a continuum of students with special educational needs” (NCCA. n.d), yet “to date no direct funding has been made available to allow schools to provide high-ability services to high-ability children” (O’Reilly, 2012, p.101).

Furthermore, the Act of 2004 provides entitlements for students with “special educational needs” and accordingly for students with exceptional ability, but despite eleven years³ since statutory provisions were made, over 17 sections within the Act have not yet been commenced which is extraordinary considering the provisions relate to a such a crucial point in the lives of children (see Appendix B).

1.3.2. Educational Disadvantage

A number of the various aspects relating to the area of ‘educational disadvantage’ shall be discussed at length in Chapter Two (Literature Review Chapter) and Chapter Four (‘Context of the Case’ Chapter). However at this point, with regard to the Act of 1998, it is important to acknowledge that the term ‘educational disadvantage’ was first statutorily

³ Correct as of August 2015

defined in the Act of 1998, and subsequently amended in the Education (Amendment) Act 2012 (s 4 (a)) as follows;

“educational disadvantage means the impediments to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools;”

Interestingly, s 7 of the Act of 2012 repeals s 32 (educational disadvantage) from the Act of 1998 and thus abolishes the Educational Disadvantage Committee; yet no amendment is made under the Act of 2012 regarding the rights of *exceptionally able students* and thus it can be argued that this right is retained under the Act of 1998.

This study aims to draw attention to the statutory right of *exceptionally able students* as a particular group of students who have ‘special educational needs’ which are enshrined in the Act of 1998 but which provision has not yet been made;

“Having enshrined the rights of ‘exceptionally able students’ in legislation, the State must either discharge those rights or alternatively amend the legislation. Since the Oireachtas intended this particular class of students (‘exceptionally able students’) to have statutory rights, these students may be within the limited class of students who can sue for breach of statutory rights as well as for negligence arising out of breach of statutory duty and for negligence under the common law. If statutory provision for ‘exceptionally able’ students’ remains on the statute book and the State fails to meet these rights, this sphere is likely to become a fruitful seedbed for litigation against the State in the coming years. In the interim, teachers and boards of management and the relevant state officials, who allocate the financial resources of the State, need to be fully aware of their statutory provisions in regard to these students so that appropriate provision is made in schools for their special educational needs in accordance with the 1998 and the Act of 2004s.”(Glenn Denning, 2012; 6.31. p.281)

1.3.3. Political Climate

While it can be argued that there is legislative provision for *exceptionally able students* under the Act of 1998, the political climate within a country often determines how people view special education programmes.

According to O'Reilly (2012; 2015) the provision which a particular country places offers gifted students is determined by the educational philosophy which prevails within that country. Within Ireland, an egalitarian philosophy dominates educational policy; with the purpose of education under this philosophical stance resting with the creation of similar outcomes for all students, and therefore the reduction of individual differences between all students (O'Reilly, 2012). This mind-set considers the provision of educational opportunities for gifted students as elitist, and unnecessary, with high-ability students being seen as able to make it on their own without the need for special interventions (O'Reilly, 2012).

Undoubtedly, in a time of economic austerity, there would be questions raised regarding the State's allocation of financial resources focusing on high-ability, or exceptionally able students. Yet with that said, there is a need for such programmes catering to the academic and social needs of such students as this thesis hopes to explain and communicate. CTYI, which is *the case organisation* of this study, and the foremost institution within Ireland serving the academic and social needs of high-ability students, shall now be considered.

1.3.4. Centre for Talented Youth, Ireland: The Case Organisation

This research study is based upon an initiative which was created by CTYI. CTYI was set up in 1992 as a non-profit organisation which bases its principles on the CTY program at Johns Hopkins University in the United States. The Centre offers participants the chance to study academic enrichment classes on the DCU campus and provides a wide range of

subjects at young student (6-13 years) and older student (13-17 years) level. In more recent years, the organisation has expanded its younger student programmes into a number of third-level institutions around the country. The mission statement states that CTYI “aims to allow all talented students to reach their potential academically and socially by providing relevant and interesting challenges based on ability and interest rather than age” (CTYI, n.d). Since its introduction into Ireland, over 60,000 students have taken part in courses with CTYI.

Over the years, students from all socio-economic groups have been represented on CTYI’s programmes. However, it was recognised that students from lower socio-economic groups tend to be under-represented when compared with their peers from higher socio-economic groups. This under-representation of students from homes of low socio-economic status is not just confined to academic programming within Ireland, but it is also the case in other countries too; most notably the United States, where the majority of studies relating to high-ability, low-income students have been conducted.

1.4. The Research Topic

The rationale for this study developed out of two distinct areas. Initially, out of an awareness regarding the under-representation of students from disadvantaged backgrounds on CTYI's programmes and also, an awareness that students from these backgrounds are less likely to participate in higher education (HEA, 2008; McCoy & Byrne, 2011; Smyth & McCoy, 2009). With these two factors in mind, an initiative was developed at CTYI in conjunction with the DCU Access Service to provide secondary school students (aged 13-17 years) from socio-economic disadvantaged schools the opportunity to participate in CTYI's summer academic programmes within a higher education environment. The section below divides the research topic into two sections; firstly in relation to the under-representation of students within academic programming and secondly, when considering the low-participation of such socio-economic groups within the higher education system.

1.4.1. Under-representation within Gifted Programming

It should be stated upfront that research relating to high-ability, low-income students within Ireland is minimal. The vast majority of the research relating to this topic comes from the United States. As a result, many of the sources cited throughout this thesis have originated from studies outside of Ireland. While such studies are based in a different context, they share a common thread which relate specifically to high-ability, low-income young learners. Where relevant and present, Irish sources are cited.

In terms of the under-representation of high-ability, low-income students within CTYI programmes, students from socio-economic disadvantaged backgrounds are under-represented within the Centre's programmes. The exact numbers of students attending the older student summer programmes from disadvantaged backgrounds before this study commenced is no longer available due to a change in the database system within

CTYI. However, from speaking with the Centre's Director, Dr. Colm O'Reilly, he estimates that the annual number of students' participating in the summer programmes from the schools which are the focus in this study in the period of 2007-2010 was less than one percent.

In relation to the United States, vast achievement gaps have been identified between low-income students' and their higher-income peers (Olszewski-Kubilius & Clarenbach, 2012; Olszewski-Kubilius, & Peternel, 2009). In a study which analysed the data from three longitudinal studies, Wyner, Bridgeland and DiIulio (2007) reported that 72 percent of highly achieving first grade students came from the upper economic half while the remaining 28 percent were from the lower economic half. Lee, Olszewski-Kubilius and Peternel (2009) remark that such disparities in achievement levels which can be found at the start of elementary (primary) school may grow larger in time, with Olszewski-Kubilius and Clarenbach (2012) maintaining that the performance of economically disadvantaged students may even regress as students' progress through school.

As students from disadvantaged groups are more likely to perform at lower-levels than those students from more advantaged backgrounds in achievement tests, students from lower-income backgrounds are often less likely to be identified as suitable for programmes focusing on the development of academic talent (Kim & Dockery- in press; Kaul, 2014; Healion, 2013; Swanson, 2010). A number of other reasons have also been suggested throughout the literature for low levels of student participation within gifted programming such as the high financial costs associated with programme participation, the lack of parental knowledge regarding the presence of such programmes, the absence of encouragement and support from family members, and poor self-confidence regarding student's own academic abilities (Kim & Dockery- in press; Harradine, Coleman, & Winn, 2014; Swanson, 2006; VanTassel-Baska et al., 2004; Borland & Wright, 1994).

Burney and Beilke (2008, p.171) insist that “the condition of poverty”, which is strongly related to low-socio-economic status, is a critical factor influencing student achievement. Swanson (2010, p.129) maintains that the effects of poverty are “the most pervasive, and inhibiting force” to a child’s success in school, with VanTassel-Baska (2010) suggesting that poverty, not race or gender, is the primary variable leading to the under-representation of certain groups within gifted programmes. There is no agreed strategy in the literature for addressing or increasing participation levels. However, Olszewski-Kubilius (2007, p.43) suggests that the creation of partnerships between universities and local schools for the purposes of identifying and supporting low-income youth can be “very effective and powerful”.

From a research perspective, the Aiming High programme provides a unique opportunity to learn about high-ability, low-income learners within the Irish context. Matthews and Mc Bee (2007, p. 167) recognise that high-ability students can be “extremely difficult to assemble” in large numbers. Considering this, it is a rational assertion to suggest that the issue becomes further compounded when attempting to study high-ability students from areas of socio-economic disadvantage where they are typically under-identified and therefore less likely to have access to academic programming opportunities.

1.4.2. Under-representation within Higher Education

As well as students from lower socio-economic groups being less likely to take part in programmes focusing on the development of academic talent, such groups of young people are also under-represented within the Irish higher education system (McCoy & Byrne, 2011; Smyth & McCoy, 2009; HEA, 2008).

Nowadays, it is widely recognised that the achievement of a higher education qualification is viewed as important as it is considered to confer “...significant individual

benefits in terms of personal development, social status, career possibilities, and...life time earnings” (James, 2007, p.2). Increasingly, as education and related qualifications determine to a large extent the life chances of people, those who leave the formal education system with few or no qualifications are at a disadvantage. These individuals, in turn, become more susceptible to an increased risk of poverty and social exclusion (Combat Poverty Agency, 2003).

In a consultation paper from the Higher Education Authority (HEA) (2014), which sought to generate contributions from various stakeholder groups for the National Plan for Equity of Access to Higher Education, 2014-2017, it was acknowledged that there has been great progress made in relation to widening access of traditionally under-represented groups within the Irish higher education system. Yet, the paper recognises that “there are deep reservoirs of educational disadvantage” within the Irish higher education system which still need to be addressed (p.3).

The rationale for this study emerges from the interplay of these two interrelated areas; providing students from under-represented communities the opportunity to participate in an academic programme within a higher education environment.

1.5. The Aiming High Initiative

The Aiming High initiative was launched in 2010 as a collaborative project between CTYI and the DCU Access Service in order to target local secondary schools around DCU which were identified by the Department of Education and Skills (DES) in areas at risk of educational disadvantage (DES, 2005).

1.5.1. Who Is Involved?

Aiming High targets second-level students from the DCU Access linked schools. There are currently 23 secondary schools (previously 24 schools⁴) which receive special supports from the DCU Access Service. These special supports will be explained at a later stage in this thesis, but it should be noted at this point that the vast majority of these schools (19 schools) have been identified as DEIS schools by the DES, with a number of others (five schools) been taken as *special cases* by Access Service as they do not differ dramatically from those schools which are classified disadvantaged under the official system (Smyth, McCoy & Kingston, 2015, p.79). The acronym '*DEIS*' stands for *Delivering Equality of Opportunity in Schools*. This action plan was launched by the DES in 2005 in order to "address the educational needs of young people from disadvantaged communities" (DES, 2005, p.7).

1.5.1.1. The DEIS Initiative- Delivering Equality of Opportunity in Schools

There are DEIS schools both at primary and post-primary level. For primary schools, there are three different levels with regards to a school's DEIS status (level 1 being the most disadvantaged, up to level 3 being the least disadvantaged). Interestingly, there is no such rating factor in place for DEIS secondary schools. Currently, there are 193 secondary schools nationwide receiving support under the DEIS scheme⁵ (Smyth, McCoy and Kingston, 2015).

⁴ From September 2014, there are twenty-three DCU Access linked schools with the merger of Mater Christi Secondary School and Patrician College. For the purposes of this study, and as the majority of data collection was completed before this merger, these two schools will be identified separately throughout this study.

⁵ There are 732 post-primary schools in Ireland (DES, 2015).

The supports given to secondary schools under the scheme include;

- More funding
- Access to a range of supports under School Completion Programme
- Access to a Junior Certificate Schools Programme
- Access to a Leaving Certificate Applied Programme
- Access to planning supports
- Access to a range of professional development supports

(Department of Education and Skills, n.d.)

In terms of the identification criteria for a post-primary DEIS school, prior to the commencement of the DEIS initiative, an assessment was carried out by the Educational Research Centre on behalf of the DES. This assessment used centrally-held data from the Post-Primary Pupils and State Examinations Commission databases. All of the schools in the State were ranked on an index on the basis of levels of disadvantage, defined in terms of both learning outcomes and social and economic factors (Smyth, McCoy & Kingston, 2015, p.7). This index included data on Junior Certificate retention rates by school, Leaving Certificate retention rates by school, the overall performance score of the school at Junior Certificate and the percentage of students at junior cycle on medical cards.

In a report evaluating the impact of the DEIS programme, Smyth, McCoy & Kingston (2015, p.vii), emphasise that DEIS schools differ markedly from non-DEIS schools in terms of the social class background, parental education, household income and family structures of their students. Furthermore, schools in areas of disadvantage, have lower second-level completion rates than non-DEIS schools and hence, less progression to post-school education and training. Finally, the report also advises that although there have been improvements, there continues to be concentrations of disadvantage within DEIS

schools, and there is a need for the continued (if not increased) stream of funding into the programme.

The table below (Table 1.1) presents an overview of where the participating DCU Access schools are located within North Dublin. The DCU Access schools are located in postcodes 5,7,9,11,13, 17 and North Co. Dublin. It is clear from the figures below, that Dublin 11 has the highest number with seven participating schools.

Postcode	Delivery Area (An Post)	Number of Schools
Dublin 5	Raheny, Kilester, & Kilmore	4
Dublin 7	Cabra & Phibsboro	3
Dublin 9	DCU, Ballymun East	6
Dublin 11	Beaumont, Ballymun West, & Santry	7 ⁶
Dublin 13	Donaghmede & Baldoyle	2
Dublin 17	Clonshaugh	1
North Co. Dublin	Swords	1
Total DCU Access Schools		24

Table 1.1 Breakdown of participating schools according to postcode and delivery area

In a study which analysed the findings of the 2011 Census, O’Sullivan, McMurry, and Desmond (2014) profiled a number of disadvantaged areas within North Dublin. The study is interesting as the areas profiled within the research are where many of the DCU Access-linked schools are located. Within the study, the 2011 Pobal HP Deprivation Index was applied to provide an indicator for the level of deprivation within a number of areas in North Dublin. This index uses census data relating to demographics, class composition, and the labour market situation in order to generate a score in order to construct a national average of 0 with each area given a minus or a plus against this average.

⁶With the merger of Mater Christi Secondary School and Patrician College (as of September 2014), there are currently six schools within the postcode of Dublin 11. As the majority of data collection was undertaken prior to this merger, the two schools will be identified separately throughout this study.

Scores of -10 to -20 indicates that an area is disadvantaged, while a score of +10 to +20 indicates an area is affluent (Haase and Pratschke, 2012).

This research is interesting as it uses Census electoral divisions instead of postcodes to profile the various areas of North Dublin. Such information provides a more detailed breakdown of the level of disadvantage within the areas which the schools are based. Table 1.2 provides an overview for a number of different electoral divisions, while also illustrating that the areas being targeted are not uniformly disadvantaged to the same extent.

Relative Deprivation Index figures)	National Average= 0	(based on Census 2011
Ballymun	-11	Disadvantaged
Beaumont	+1.3	Marginally above average
Finglas North & Glasnevin	-3.7	Marginally below average
Kilmore & Priorswood	-12.5	Disadvantaged
Whitehall	+3	Marginally above average

Table 1.2 Relative Deprivation Index- North Dublin areas

The study also analysed the education level of the population within the profiled areas. O’ Sullivan et al., (2014) found that the majority of the population are educated to secondary level, with a “significant percentage of the population aged 15+ with no education beyond primary level” (p.15). The percentage of the population over 15 years who are educated to degree level (undergraduate or postgraduate) also is particularly low in some areas, for example, in parts of Coolock less than 10 percent (8.7 percent) are educated to degree level, compared with the national average of just under a quarter (24.6 percent).

While the focus of this study which is based on the Aiming High initiative does not intend to reverse these trends, it is important to provide this background and contextual information in order to add further justification for the presence of such a programme.

1.5.2. What Does Aiming High Involve

The participating students within the Aiming High initiative have the opportunity to take part in the summer courses at CTYI. In order to be eligible for this opportunity, students must be identified and nominated by their respective schools for the CTYI Talent Search assessment which takes place on the DCU campus during the first three months of the calendar year. Once the students have been assessed, they are placed into one of the three different summer programmes at CTYI.

1.5.2.1. Summer Programme Overview

Students entering CTYI under the Aiming High initiative feed into one of the three established older student summer academic programmes. A student's score on the Talent Search assessment determines the programme placement.

The CTYI Academic Programme is open to students who score in the 95th percentile or above in the Talent Search. The Centre for Academic Talent (CAT) programme is open to students scoring between the 85th to 95th percentile, while the Summer Scholars programme is for students scoring below the 85th percentile, or for any secondary school student irrespective if they have sat the Talent Search assessment or not. The three different summer programmes are in place to ensure the principle of *optimal match* which will be discussed in the second section of the Literature Review Chapter. While all three programmes are enriching and accelerative in nature, differences exist as to the entry criteria imposed, the course duration, the speed of the content delivery and the depth of the curricula.

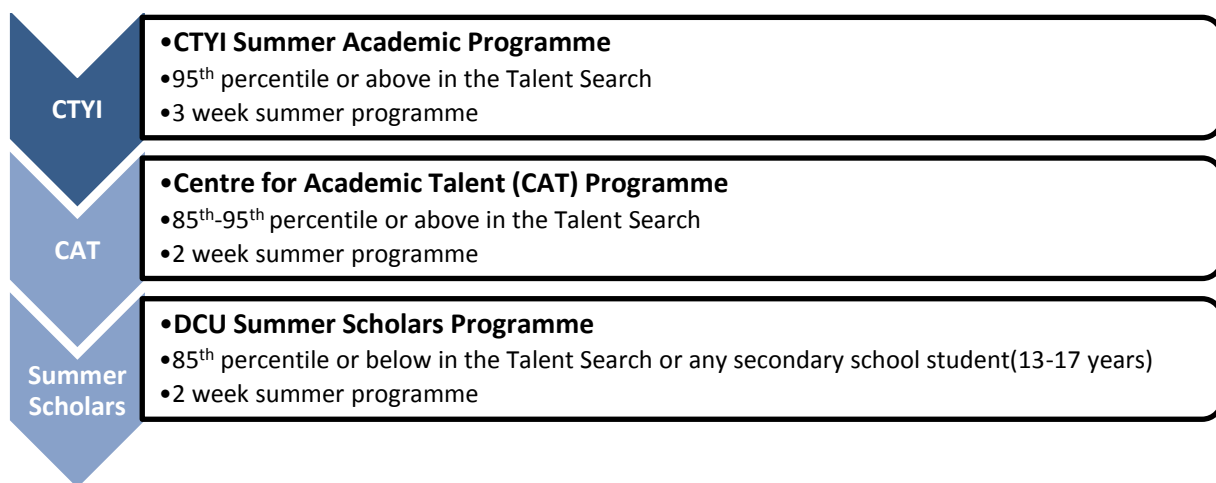


Figure 1.2 Overview of the older student summer academic programmes at CTYI

In terms of the subjects themselves within the individual programmes, all three programmes are all highly academic in their outlook. The CTYI and the CAT courses often are quite specific and often have subjects which overlap, while the Summer Scholars programme generally takes a broader approach with regard to the subject options in order to give students a taste of university style courses. The below illustration provides an example of a sample of the subjects offered under the three programmes from summer 2014, with Appendix H providing a more comprehensive account.

CTYI Summer Academic Programme	Centre for Academic Talent (CAT)	DCU Summer Scholars
Architecture Forensic Archaeology Philosophy Medicine Game Theory Film Studies	Behavioural Psychology Cutting Edge Science Criminology Medicine Popular Fiction	Computers & Technology Engineering Psychology Law General Science

Table 1.3 A sample of the subjects offered across the three older student programmes at CTYI (2014)

Fee Information

The financial cost of the courses under the Aiming High scheme varies greatly to the traditional fee structure.

Under the scheme, students are eligible for financial assistance to cover the cost of the course fees. This financial assistance is provided by a private organisation and due to this funding, the cost of the programmes under the Aiming High initiative is significantly less when compared to the standard fees. The existence of these reduced fees or the “scholarship” as the participants’ referred to it, makes it possible for the students involved to take part. As the students involved reside in near proximity to the campus, the subsidised fee applies to commuting places only where students must travel to-and-from campus the daily. A critical point in relation to the subsidised fee scheme is that once students sit an assessment with CTYI, they have the opportunity to participate in the courses each summer for the duration of their secondary school years for the subsidised fee amount.

The table below (Table 1.4) provides an overview of the cost of the programme under the Aiming High scheme, in comparison to that of the traditional entry route. It is evident that significant differences exist in relation to the normal cost of the courses and those covered with the financial subsidy.

Programme Name	Programme Duration	Traditional Entry Route Fees (Commuter)	Aiming High Fees
CTYI Summer Academic Programme	<i>3 weeks</i>	€850.00	€100.00
Centre for Academic Talent (CAT)	<i>2 weeks</i>	€600.00	€75.00
DCU Summer Scholars	<i>2 weeks</i>	€500.00	€75.00

Table 1.4 Fee comparison in relation to the older student programmes (figures correct as of summer 2015)

1.6. Significance of the Study

This research study of Aiming High is significant as it intends to offer new insights into an innovative programming strategy targeting high-ability students from under-represented and disadvantaged backgrounds. Currently, no other programme exists within the gifted education field, or within Ireland which meets the needs of this specific population of learners in the same way.

From the perspective of the field and the research from the United States, there has been a call for strategies which target students of high-ability from low-income families. In 2012, Olszewski-Kubilius and Clarenbach compiled a report for the National Association for Gifted Children (NAGC) outlining the need for support in to order reach low-income high ability students. In particular, this report- *'Unlocking Emerging Talent: Supporting High Achievement of Low-Income, High Ability Students'* appeals for a research agenda focusing on evidence-based research for this "special population of learners" (p.24). There is a plea to identify existing 'successful' (where "success" is defined as enabling low-income students to increase their academic achievement and succeed at each level of schooling) educational programmes and interventions so as to create;

"...strong evidence based models which produce performance results for low-income, high-ability learners, (as well as) recommending educational best practices, and identifying both research and public policy gaps that, if filled, could achieve significant results for the future" (p.3).

Kaul (2014) also realises the necessity for research focusing on high-ability, low-income students. Kaul (2014, p.61) maintains that limited research has been conducted on gifted programmes with a summer component for low-income learners, and that prior to her research, no studies had been conducted which examined the effects of summer-only programmes amongst economically disadvantaged students.

This research study aims to concentrate on filling the gap within the field in order to present an evidence-based programme which serves and caters to high-ability, low-income students. From the Irish perspective, this study is important, as it aims to contribute knowledge to a specific population of learners which has had little research carried out amongst it previously.

1.7. Research Aims and Questions

The aim of this case study focuses on exploring the experiences of high-ability students from low-income families who have participated in a summer academic programme at CTYI. The study also intends to examine the various defining features of the Aiming High initiative in order to communicate how such aspects of the programme's design contribute to students' experiences within the programme. The research also hopes to address a number of sub-questions relating to the specific experience of students while on the programme. In particular it asks:

- Do students benefit from participating in the courses, and if so, how?
- Are there any negative consequences for students taking part?
- Does taking part in a university programme shape students' opinions towards higher education?
- Is there any impact for students when they return to school after participating in a summer programme?
- What aspects of the programme's design assist in shaping students' experiences with the programme?

Ultimately, the research aims to generate a descriptive and detailed account of the experiences which students have while participating in the Aiming High initiative.

1.8. Thesis Synopsis

The thesis is divided into six chapters. Below a synopsis of each chapter is outlined.

Chapter 1- Introduction

This chapter, Chapter One introduces and provides background information to the study itself. The case organisation, CTYI and the Aiming High initiative are explained. The rationale and the significance of the study are also outlined. The chapter concludes with an overview of the study's research questions, and the aims of the research.

Chapter 2- Literature Review

Chapter Two will present a review of the literature relating to the research topic. This chapter shall be divided into two sections. The first will focus on contextual literature relating to the topic, most notably, Irish educational policy initiatives targeting educational disadvantage, and the importance of increasing participation levels within the Irish Higher Education system amongst students from areas of socio-economic disadvantage. The second section shall summarise the major conceptions of giftedness within the field, the methods for identifying high-ability students, and the various programming strategies utilised in catering to such students. The current provisions regarding programming opportunities for students coming from areas of socio-economic disadvantage will then be put forward before the role of the important stakeholder groups will be identified and explained.

Chapter 3- Research Design

The design of the research study will be discussed in Chapter Three. This qualitative research study utilises Denzin and Lincoln's (2011) five phase model of research design as the main shaping force behind its design. The quest for knowledge is centred on a belief in the interpretivist worldview which highlights the importance of qualitative research. Case study will be the methodological strategy used to explore the experiences of students on

the programme, with a number of research tools and research participants being utilised as part of the research design. Upon a summary of the data collection procedure, the analysis phase of the research shall be explained. The chapter will finish by highlighting issues which need consideration in the research process; in particular, ethical considerations, evaluating the quality of research and accessing participants.

Chapter 4- Context of the Case

Chapter Four will contain specific and descriptive contextual information relating to the case and the programme itself. Within a case study, the context is of great significance. The chapter will therefore be structured into a number of sections which aim to provide the reader with contextual information relating to the programme. These sections include the current Irish educational policy initiatives focusing on addressing educational disadvantage, as well as a detailed account of Aiming High. The final two sections will relate to the role of the programme stakeholders and the importance of financial assistance as important contributing factors impacting upon the student experience within Aiming High.

Chapter 5- Findings

Chapter Five delivers the findings of the case study. The findings are presented according to a number of themes; academic, social, personal and the negative implications of programme participation.

Chapter 6- Discussion & Conclusions

Chapter Six discusses the findings of the thesis in relation to previous research studies and literature, while also concluding the study. This chapter will revisit the research questions, and will consider in detail the various aspects of the programme's design which contribute to the experience of students while on the programme. The chapter will also reflect on

the significance and implications of the research, while also putting forward, a number of recommendations, the limitations of the study and possible areas for further research.

1.9. Conclusion

This chapter introduced the study. It aimed to give an overview of the case itself and to provide the rationale for the study. In addition, the chapter provides a synopsis of the five remaining thesis chapters.

The next chapter will review the literature within the field which relates to the research topic.

Chapter 2- Literature Review

2.1. Chapter Introduction

This chapter aims to review the literature relating to the subject matter of the thesis. Oliver (2008) asserts that the purpose of the literature review is to lay the foundation for the current research and to outline the main subject matter which surrounds the study. With this purpose in mind, this chapter is divided into two parts. The first section shall address contextual literature relating to the topic, in terms of educational disadvantage for students coming from socio-economically disadvantaged areas within Ireland. The second section will discuss the construct of giftedness, identification practices and the merits of special out-of-school programmes in targeting students from areas of disadvantage. The chapter will conclude with an exploration of the role of parents and schools within the talent development process. When combined, these two sections aim to provide the reader with a comprehensive overview of the research landscape relating to the subject matter under study.

2.2. Part 1-Contextual Literature

This section of the review aims to locate the research topic within the larger body of literature most notably relating to Irish educational policy. Firstly, the construct of *educational disadvantage* will be put forward as an important concept in this study. The second part of this section will consider the inequality in the participation levels of students from socio-economic disadvantaged areas within the higher education system, and the rationale behind the drive for greater numbers at university-level. This part of the review shall conclude with a call from within the literature for increased engagement between universities and schools on behalf of students coming from socio-economic

disadvantaged groups within the Irish higher education system. Figure 2.1 provides a visual overview of the chapter.

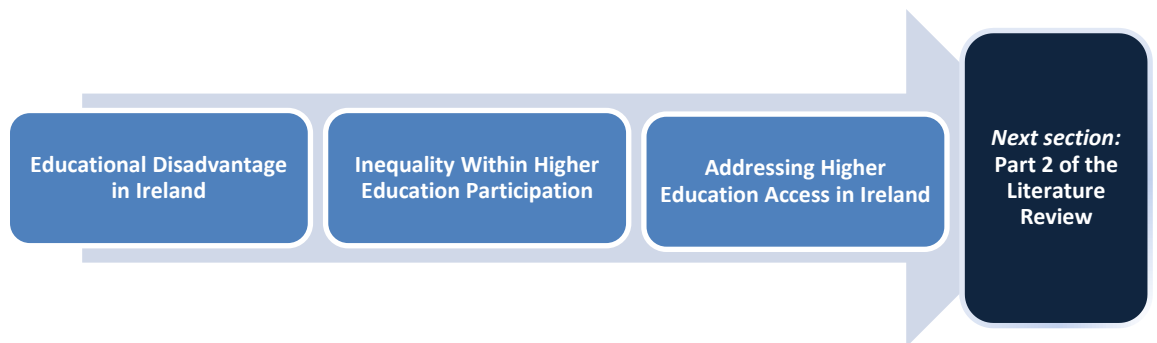


Figure 2.1 Structure of Part 1 of the Literature Review Chapter

2.2.1. Educational Disadvantage in Ireland

The term *educational disadvantage* is defined as “the impediments to education arising from social or economic disadvantage which prevent students from deriving appropriate benefit from education in schools” (Education Act, 1998, as amended). According to the HEA (2008), the sources of educational disadvantage are rooted in the differential economic, social and cultural capital of families which can in turn result in a disparity in relation to educational outcomes for students (Tormey, 2010; HEA, 2008; Kellaghan et al., 1995). These differential outcomes arguably do not just permeate through one level of education, but may be present throughout the lifespan of the individual, essentially resulting in the lack of access to educational opportunities and life chances (Murphy, 2008). Furthermore, educational disadvantage can tend to cluster in specific schools and can be reproduced across generations (HEA, 2008).

Borland et al. (2004) suggest that overcoming educational disadvantage is not susceptible to quick-fix answers as it is the result of long-term conditions. Consequently, they recommend that any intervention strategies require a sustained commitment from

various intermediaries, with the failure to do so, further facilitating the entrenchment of disadvantage.

In relation to assessing who is at risk from educational disadvantage, Kellaghan et al. (1995) suggests that a number of variables may be used to indicate its presence, with such indicators including; parental socio-economic status, school performance, geographic areas or neighbourhoods. Socio-economic status is commonly used as an indicator for at-risk groups. The term socio-economic status encompasses “an individual’s relative standing with regards to income, level of education, employment, health and access to resources” (Burney & Beilke, 2008, p.173). In order to determine one’s socio-economic status a ‘dominance approach’ is used in which the higher socio-economic status of the parental unit is applied. Kellaghan et al. (1995, p.34) suggest that using parental occupation is the “best overall measure of an individual’s position in the economic, power and prestige dimensions of the socio-economic hierarchy”.

Typically, students from the lower socio-economic categories are at-risk of educational disadvantage. Such groups include students in which the head of the household is engaging in an unskilled manual occupation (*G*), a skilled manual worker (*E*) or a semi-skilled worker (*F*) (Kellaghan et al. 1995).

Table 2.1 provides an overview of the eleven socio-economic classifications used by the Central Statistics Office (CSO) in Ireland, with the categories most at-risk of educational disadvantage being highlighted.

▪ A - Employers & Managers
▪ B - Higher Professional
▪ C - Lower Professional
▪ D - Non Manual
▪ E - Manual Skilled
▪ F - Semi-skilled Manual Workers
▪ G – Unskilled Manual Workers
▪ H – Own Account Workers
▪ I – Farmers
▪ J - Agricultural workers
▪ Z - All other gainfully occupied

Table 2.1 Socio-economic groups used in Ireland (CSO, 2011)

The geographic area in which a school is based can also be used as an indicator of educational disadvantage (Kellaghan et al., 1995). The central benefit of using a school’s geographic location as an indicator is that it allows for a targeted response to address the inequality identified. Such a strategy was undertaken in 2005 with launch of the DEIS Action Plan for Educational Inclusion (see section 1.5.1) by the DES to target at-risk schools and communities.

2.2.2. Inequality within Higher Education Participation

Within Ireland since the 1960’s, there has been an increase in the number of students participating in higher education. While this has led to a rise in participation levels for most social groups, relative differences still exist among lower socio-economic groups and their non-participation in higher education (McGuinness et al., 2012).

Participation rates tend to be consistently highest amongst those from higher professional backgrounds, and lowest amongst those who are most at risk of educational disadvantage, most notably, working-class groups, such as the unskilled manual, unemployed and agricultural workers. McCoy et al. (2010, p.5) argue that the non-manual group can also be classified within this category as “their participation levels do not exceed those for the groups that are typically classified as disadvantaged”.

Smyth and McCoy (2009) argue that a Leaving Certificate qualification is now the minimum needed to secure further education/training and high quality employment. They maintain that higher levels of education are likely to contribute to higher levels of income, while also having a wider impact in terms of life expectancy, health status, social cohesion and positive intergenerational effects. On the other side of the coin, there are a number of costs associated with early school leaving which can be considered from both an individual and societal perspective. From an individual point of view, early school leaving can be associated with greater chances of unemployment and lower earnings. From a societal perspective, costs may include; income tax forgone, the cost of welfare payments, greater utilisation of health services, greater chance of crime and thereby, the cost of imprisonment (Smyth & McCoy, 2009, p.54-56.)

Research from the Organisation for Economic Co-operation and Development (OECD) also highlights the importance of investing in education. The report, Education at a Glance (2014) draws comparisons between the 34 OECD member countries, as well as a number of the G20 and partner countries in order to provide a snapshot of the various countries’ achievements in terms of their educational policies. With regards to investment in education, Ireland had the third greatest annual expenditure per student of all OECD countries by public institutions for all services excluding research and development. The report also presents a number of positive findings in relation to educational attainment

and participation rates within the various levels of the Irish education system. For instance, 93 percent of young people were expected to graduate from upper secondary education in their lifetimes, while 46 percent were expected to graduate from university as of 2012. This compares with OECD averages of 84 percent and 39 percent respectively. However, despite high levels of educational achievement, Ireland was reported to have one of the highest unemployment rates within the member countries, with an unemployment rate of 13 percent amongst 25-64 year-olds across all levels of education in 2012. The report links these findings to the economic and social incentives to invest in education. The report stresses that in all OECD member countries, including Ireland; adults who are educated at tertiary level (i.e. further or higher education) receive greater earnings than adults who have just completed secondary school education. In turn, this has benefits for the individual involved, but also from a societal perspective in terms of greater tax revenues and social contributions.

While it is clear that there has been significant growth in numbers participating in higher education, McCoy and Byrne (2011) claim that significant and persistent inequality remains amongst lower socio-economic groups in relation to the accessing higher education opportunities. The achievement of 'equity in access to higher education' has been made a national priority within Irish educational policy over the last decade (HEA, 2014). Within this time, there have been a number of different plans drawn up by the National Office of the Higher Education Authority in consultation with the DES to address the low participation levels amongst certain social groups within the higher education system. These groups include individuals with disabilities, mature students and young people from lower socio-economic groups (HEA, 2014). For the purposes of this review, focus will be solely given to young people from socio-economic disadvantaged backgrounds, and initiatives to target such.

The first notable plan, *Achieving Equity of Access to Higher Education in Ireland: Action Plan 2005-2007* (HEA, 2004) was significant in that it laid the foundation for the 'DEIS' initiative. This initiative is important as it concentrated on addressing educational disadvantage both at primary and secondary school level. In 2008, a new *National Plan for Equity of Access to Higher Education 2008-2013* was launched. This plan continued on the work done by previous strategies while making some noteworthy contributions, including the creation of the Higher Education Access Route (HEAR) which provides a special admission scheme for students from socio-economic disadvantaged backgrounds. The 2014 HEA Consultation Paper which asked for contributions for the *National Plan for Equity of Access to Higher Education 2014-2017* continues with the quest in achieving equity within higher education;

“(in order to make the Irish education system)...a more fully inclusive system that enables more citizens, irrespective of age, socio-economic background...to access in, participate in, and complete higher education and achieve their full potential, as part of the overall social and economic development of Irish society. Access to higher education will be intrinsic to what a higher education institution does, interlinked with teaching and learning, research and civic engagement”. (HEA, 2014, p.11)

Most recently, a performance framework (2014-2016) has been developed for the DES so that the system's performance of achieving equity can be assessed and measured in this “priority area” (HEA, 2014).

2.2.2.1. The International Context

In the developed world, the increase in the participation levels within the higher education system has generally mirrored the situation in Ireland. However, similar to Ireland, the demographic composition of the participation levels has not been equal (James, 2007, p.2).

In the European context, two initiatives focusing on under-representation of various social groups currently influence Irish higher education policy: the Europe 2020 strategy and the Bologna Process. These two initiatives are influential in strengthening the drive for a more inclusive higher education sector as they set targets for poverty reduction, and economic and social inclusion. In practice, this entails setting goals across the various member states to “remove inequalities in access to higher education so that the sector is more representative of all groups in society” (HEA, 2014, p.10).

In the United States context, significant inequalities also exist in the demographic makeup of students who progress on to university education. Certain groups are under-represented in higher education, with such groups including Black, Latino/a, Native American, and students coming from backgrounds marked by poverty.

Further afield in Australia, James (2007) maintains that there are also striking demographic imbalances amongst young people going on to university. He believes that while certain demographic groups are under-represented (i.e. ethnic minority groups), “...the most widespread and persistent source of disadvantage in access to higher education is low social class or low socio-economic status” (James, 2007, p.2).

It is difficult to make direct comparisons between Ireland and other countries in relation to third-level participation rates due to the enormous variability across countries in terms of the coding of occupations and the other classifications which are used (McCoy et al.,

2010). James (2007) summarises the inherent challenge of making of quantitative comparisons between the national access patterns of countries difficult for two reasons;

“First, the idea of social class is highly intangible and firmly grounded in national, social, cultural and economic systems. Thus, when socio-economic status is measured it is done so on quite different indicators and scales. Secondly, higher education systems also differ significantly and what is classified as higher education differs between countries” (James, 2007, p.2).

While cross-cultural differences undoubtedly exist with regard to participation levels of students from different socio-economic groups, an underlying common thread still is present, young people from disadvantaged backgrounds are less likely to participate in third-level education when compared with other groups.

2.2.3. Addressing the Issue of Access into Higher Education in Ireland: The Need for Increased Participation Rates within Irish Higher Education

The discussion around the access of higher education opportunities from traditionally under-represented groups raises questions about the reasons behind the need for greater participation levels at university level.

From the literature, the need for greater participation levels in higher education is considered important for two reasons. At one level, encouraging more non-traditional learners into higher levels of education is usually phrased in terms of achieving a more equitable education system for all students (Clancy & Goastellec, 2007). Clancy and Goastellec (2007) describe how during the twentieth century, the principle of 'equality of rights' became embedded within the societal structure of the democratic state, and as a result, it was felt that higher education should be accessible to individuals regardless of their social origin. However, even with the belief in the equal rights of every citizen, inequality can still prevail. Therefore, more recently, it has been recognised that there is a need to go beyond this equality of rights principle in order to take into account differences in opportunity structure. The onus of providing opportunities becomes placed on higher education institutions (HEI's) in order to minimise the inequalities between the various social groups;

"It has been acknowledged that merit-based admission needs to be augmented by some form of affirmative action. The rationale is that since access to higher education is, to varying degrees, competitive, it will always privilege those with superior economic, social and cultural resources...The drive to ensure that the national elite should be drawn from all social classes reflects the assumption that talents are randomly distributed amongst all social groups and places a responsibility on higher education institutions to be proactive in searching for this talent across the social spectrum." (Clancy & Goastellec, 2007, p.139)

The second reason cited throughout the literature for the increased numbers of higher education graduates relates to the economic implications. From this viewpoint, achieving a workforce of well-educated graduates is central to the economic renewal and development of the country. The higher education sector is seen as “the key to economic recovery in the short term and to longer-term prosperity” (DES, 2011, p.29). The rationale behind this stance maintains that in order to compete and remain economically competitive in the global marketplace, Ireland needs “more people with higher level skills and many of the more affluent socio-economic groups in Ireland already have participation levels at, or close to, saturation” (HEA, 2014, McGuinness et al., 2012). It is therefore considered necessary to target individuals who have the potential to participate to higher levels within the education system;

(In Ireland)... “we have reached a point in our national educational development where achievement of further growth in the higher education system will require continuing progress in relation to widening access” (HEA, 2008, p.10).

The *National Strategy for Higher Education to 2030* published in 2011 by the HEA creates a vision for the Irish higher education landscape to address the economic, social and cultural challenges that the country currently faces. The report explains that, while there has been remarkable growth in the participation levels at third-level in recent years, there is a need to raise the participation rates within the university sector further, in order to create a workforce which is capable of dealing with the complex demands of the global economy. The report recommends that the educational level of the whole population needs to be raised “at all levels”, with the prominent goal of creating a workforce of graduates with “higher-order knowledge based skills” (HEA, 2011, p.4). To realise these ambitions, part of the solution relies on increasing the participation levels within higher education and, in particular, of students from currently under-represented groups.

Strategically, to target these students, the report puts forward a number of recommendations to bring the minority groups (i.e. students from socio-economic disadvantaged backgrounds, from ethnic minorities, and from the Traveller Community) within the system into third-level studies. One of these core recommendations is an agenda of “engagement” for HEI’s and the local communities which they serve. The relationship between the HEI and the community is seen as being particularly important in the context of the promotion and achievement of greater equality in the sector (HEA, 2011 p.76). The creation of partnerships between HEI’s and community organisations is seen as having the potential and power to make significant contributions in assisting in the creation of long-term cultural and social change (RIA, 2015; HEA, 2011).

2.2.3.1. Engaging Students from Socio-Economic Disadvantaged Backgrounds within the Irish Higher Education System

Mc Guinness et al., (2012, vi) note that even with the removal of tuition fees and the expansion of places within the Irish higher education system, there has not been a “significant reduction in social inequality in higher education access”. Similar to Clancy and Gostellac (2007), they also suggest that action must be taken to offer opportunities to those groups which are at a disadvantage in order to reduce the levels of inequality;

“These factors include the level and nature of guidance provision in second-level schools, the degree of support for children and young people from disadvantaged backgrounds attending DEIS...schools, the level and nature of financial support for higher education students, and the financial resources available to families more broadly”. (p.vi)

McGuinness et al., (2012, vi) note that successful progression in higher education is strongly influenced by “academic preparedness”. McCoy et al., (2010, p.7) assert that there is a need to engage at-risk groups at earlier points of intersection, rather than simply after post-primary education as; “...inequalities do not simply emerge at the point

of entry to higher education, rather than the main socio-economic differentiation continues to occur during primary and second-level education viewing social selectivity in access to higher education as 'a cumulative process'. Adnett (2006) also supports educational interventions at an early stage as a means to encouraging participation levels in later stages of the education cycle;

“Increasing higher education participation amongst non-traditional student groups primarily requires interventions into pre-primary, primary and secondary schooling targeted at raising aspirations and attainments in groups with a low probability of attaining higher education entry requirements” (Adnett, 2006, p.309).

In a similar vein, Stormont, Stebbins, and Holliday (2001, p.413) believe that even the creation of educational supports at secondary school level are valuable for students as “it may be their last point of entry in the educational system”.

A study from McCoy et al. (2014) discusses the experiences and post-school pathways of a cohort of young people who took part in a longitudinal mixed-methods case study. The study is interesting as it links students' school experiences to their post-school outcomes within the Irish context. The study reaffirms earlier work conducted by the ERSI that young people from working class backgrounds are less likely than their middle-class peers to go onto higher education (McCoy et al., 2010). As parents from disadvantaged backgrounds often have less experience of the higher education system, there is an increased obligation for schools to provide information of post-school educational opportunities. The study also highlights the importance of having a school climate especially within disadvantaged schools which fosters high expectations and engages students early in the junior cycle in relation to post-school learning opportunities.

In terms of the strategy for targeting students from under-represented groups into higher education, one of the suggestions made by the HEA (2011), advises that there is a need for HEI's to engage with their surrounding communities and the wider society;

“Higher education institutions need to deepen the quality and intensity of their relationships with the communities and regions they serve so as...to become more firmly embedded in the social and economic contexts of the communities they live and serve” (HEA, 2011, p.77-78).

In a consultation paper for the *National Plan for the Equity of Access to Higher Education 2014-2017* (HEA, 2014), a number of challenges were outlined as being important to tackle, but which remain out of the control of the sector;

“These include the prior educational experience and that guidance and performance of some groups is such that at the point of leaving school, they are not in the position to make the transition to higher education” (HEA, 2014, p. 8).

With regard to the strategies for engaging students, there is a call for increased collaboration between higher level institutions, community organisations and schools in order to address issues relating to higher education participation inequality and educational disadvantage. James (2000, p.111) believes that such engagement activities are vital in addressing the non-participation of under-represented groups, so that the cultures of universities are “demystified” for prospective first-generation higher education entrants.

2.2.4. Conclusion of Context Section (Part 1) of the Literature Review

The contextual literature surrounding the Aiming High programme is important to consider initially so that this study can be framed amid the wider landscape of Irish educational policy. In particular any analysis of the origins and operation of the programme needs to have a clear understanding of the challenges posed by educational disadvantage and the systematic response at all levels of the Irish education system to these challenges. The second section of the chapter will now address the literature in relation to key constructs which exist in the field.

2.3. Part 2-Literature Review

Part Two of the literature review will consider studies from the field relating specifically to the construct of giftedness, identification, and programming strategies for high-ability students. The role of schools and parents will also be explored in relation to the development of academic ability. Figure 2.2 provides an overview of the various different sections of the second part of the literature review.

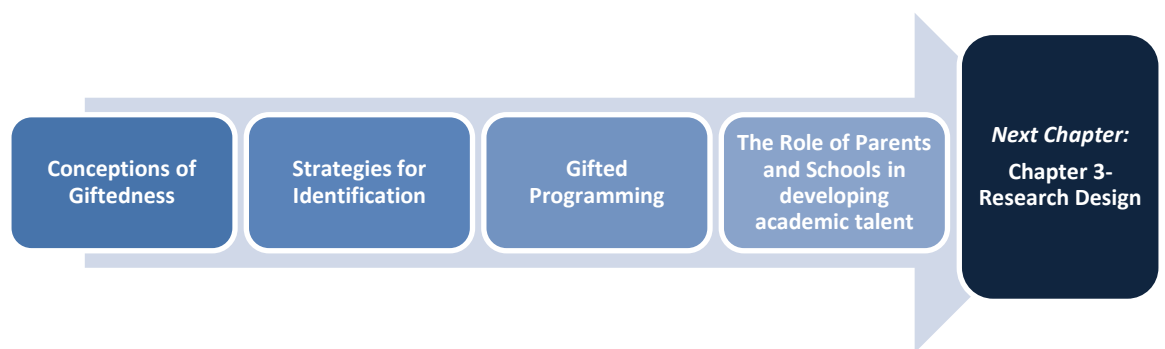


Figure 2.2 Structure of Part 2 of the Literature Review Chapter

2.3.1. What Is Giftedness?

This section will attempt to answer the questions *what is giftedness?*, and how best to identify it? Answering the question, *what is giftedness?* is a challenging task as no universally agreed definition currently exists within the field. When trying to navigate through the numerous conceptions, the most fundamental task is to establish the purpose of the definition (NAGC, n.d.). The definition is vitally important as it has direct implications for identification procedures and programming decisions;

“(definitions)...provide the framework for gifted education programs and services and guide key decisions such as which students will qualify for services, the areas to be addressed in programming, when the services will be offered and even why they will be offered” (NAGC, 2010).

As a consequence of this uncertainty over what constitutes giftedness, countless conceptualisations have been put forward to define the construct over the years. The next section will outline a number of these major stances beginning with traditional views of the concept, and subsequently moving onto a consideration of the more recent formulations. The definition from Subotnik, Olszewski-Kubilius and Worrell (2011) will be put forward as the most useful in terms of this study.

2.3.1.1. Early Conceptions of Giftedness

Over the last century, there have been many revisions, expansions and redefinitions as to what characterises giftedness. Yet, before a contemporary characterisation can be delivered, an early underpinning of the traditional view of intelligence, and in turn, giftedness is necessary.

During the latter years of the nineteenth century and the early years of the twentieth century, there was widespread consensus amongst academics in the existence of a singular and inherited notion of intelligence (Terman 1954; Spearman, 1904; Galton, 1869). Academics believed in a general level of intelligence (or 'g' factor) which permeated through the various domains of intellectual performance. This mind-set insisted that every person possessed a certain amount, that intelligence could be measured empirically, and gifted individuals were those who scored in the superior range (over 130) on intelligence quotient tests (IQ tests). Terman's (1925, p.43) restrictive definition viewed giftedness as, "the top 1% level in general intellectual ability, as measured by the Stanford-Binet Intelligence Scale or comparable instrument".

As Borland points out;

“...the gifted simply had more, often much more than what everybody else had. And what they had could be measured validly...using objective tests. Thus, identification became a matter of administering a test, determining a reasonable cut-off point to demarcate the boundary between the gifted and the rest, and rounding up those who exceed the giftedness threshold.” (1997, p.11)

As people possessed varying amounts of the ‘g’ factor of intelligence, this supposedly accounted for the individual differences in test scores and academic performance. Hence, the conceptualisations of giftedness reflected such notions of intelligence; in favouring psychometric definitions of academic giftedness; and focusing on gifted individuals as being different from the majority, with inherited, definable, measurable and intellectual characteristics (Borland, 2005). Within this view, gifted individuals are presumed to remain gifted throughout all their lives, whether or not they actually achieve (Subotnik, Olszewski-Kubilius, & Worrell, 2011, p.5).

While this traditional view of giftedness has had considerable influence within the field, and has contributed much to what we “know” about the gifted, it needs to be stated that the sample used for Terman’s study was based on a sample which was “far from representative” either socio-economically, racially or ethnically (Borland, 2004, p.2);

“Clearly, the “Termites” were, as a group, Whiter and considerably more affluent than their lower-IQ school-age peers...If the foundation of our knowledge rests on a study of high-SES (socio-economic-status) mostly White children with high IQ’s this knowledge will be translated into practice.” (Borland, 2004, p.3)

Nowadays, it is recognised that intelligence is a stable construct; it is not fixed but can change over time. While a certain amount of intelligence is inherited, a large portion can be substantially influenced by environmental factors. For some academics and

researchers, intelligence testing is the only way to identify giftedness (Bracken, 2012; Bracken and Naglieri, 2003; Naglieri and Ford, 2003, 2005). For instance, Bracken (2012, p.84), argues that intelligence tests have historically been the “most important criterion in the process of identifying gifted students”. Intelligence tests are seen to be beneficial as they are “tried-and-tested” and the most “empirically defensible identification procedure” (p.84). Yet, with the movement towards a broadened conception of giftedness, Bracken (2012) emphasises that this has resulted in the use of “less direct, nebulous and debateable methods” in the identification process. Nonetheless, Bracken (2012) does concede that for certain minority groups, intelligence tests should be used in conjunction with more subjective identification methods (e.g. teacher recommendations) in order to ensure diversity within gifted programmes.

2.3.1.2. Modern Conceptions of Giftedness

While a restrictive and conservative definition of giftedness provides a clear cut-off and a boundary as to who is gifted, such a traditional view has received criticism for overlooking students whose potential for superior performance does not show up on intelligence tests (Subotnik, Olszweski-Kubilius, & Worrell, 2011; VanTassel-Baska, 2005; Borland, 2004; Renzulli, 1978). The unitary notion of intelligence which previously dominated the field became disputed and broadened by the latter half of the twentieth century as a more nuanced conceptualisation of intelligence emerged. The theories which have occupied the field since the 1950s claim that the importance of a solitary notion of intelligence and general ability is less informative than it first appeared to be (Sternberg, 1999).

Robert Sternberg has made a significant contribution to the field with a number of theories of intelligence as well as various conceptions and models relating to giftedness.

He argues that the traditional view of intelligence (i.e. the 'g' factor model) which considers intelligence as a unitary construct is incomplete and inadequate (Sternberg, 2002, 1999). He proposed the Triarchic Theory of Intelligence (1985) which in time developed into the Theory of Successful Intelligence (1999). This theory distinguishes between three types of human abilities, analytical, creative and practical. Sternberg (1999) reasons that his views are "not wholly incompatible" with the theory of general abilities (Jensen, 1998; Spearman, 1927) as analytical abilities often lead an individual to be labelled as gifted in school and can be measured using standardised tests (e.g. IQ testing). Critically, Sternberg's theories of intelligence expand upon traditional views of intelligence. For instance, the Theory of Successful Intelligence puts forward that an individual's ability to achieve success depends not only on analytic abilities but an individual's ability to shape, select and adapt to their environment through the balance of creative, practical abilities and analytic abilities.

In terms of conceptions of giftedness, Sternberg's Pentagonal Implicit Theory of Giftedness (Sternberg and Zhang, 1995) seeks to capture regular individual's intuitions about what makes a person gifted. According to Sternberg and Zhang (1995) an individual must satisfy five conditions for them to be labelled as gifted;

- Excellence- Excellence in a particular domain relative to one's peers
- Value- Value in an area of eminence
- Rarity- Superior performance must be rare
- Productivity- The excellence in the area must have the potential to develop into a tangible outcome
- Demonstrability- The high ability must be able to be demonstrated through assessment

Sternberg and Zhang (1995) argue that the value of implicit theories provide a dimension of understanding that cannot be obtained through the study of explicit theories, and help form the structure by which we can define giftedness.

The WICS model is another contribution from Sternberg (Sternberg, 2003). WICS, which is an acronym standing for Wisdom, Intelligence, Creativity, Synthesised. According to this model, gifted individuals are those who combine wisdom, intelligence and creativity. Sternberg (2011) maintains that the WICS model provides a framework to identify the elements that are required to make a great and successful leader.

Howard Gardner's Theory of Multiple Intelligences (MI) (1983) also marked a significant movement away from the belief in a solitary and universal view of intelligence. According to Gardner, the traditional theory of intelligence which was outlined in a previous section (2.8.1) was not complex enough to measure the breadth of human intelligence. As an alternative, Gardner identifies seven autonomous types of intelligence, each of equal importance. They are musical, logical-mathematical, spatial, bodily kinaesthetic, interpersonal, intrapersonal and verbal-linguistic, which later became extended to nine, with the inclusion of naturalistic and existentialist intelligences (Gardner, 1999). Gardner's theory assumes that individuals can possess intelligence in different areas and in varying amounts. According to this theory, giftedness cannot be satisfactorily defined as solely having an intellectual capacity that is higher than the average across all domains, but can be considered as the manifestation of advanced development in any of the nine distinct intelligences.

Another prominent conception within the field comes from the NAGC. This definition also adopts a domain-specific conception of giftedness construct. According to a position statement in 2010, gifted individuals are;

“...those who demonstrate outstanding levels of aptitude (defined as an exceptional ability to reason and learn) or competence (documented performance or achievement in the top 10% or rarer) in one or more domains. Domains include any structured area of activity with its own symbol system (e.g. mathematics,

music, language) and/or set of sensorimotor skills (e.g. painting, dance, sports).”
(NAGC, 2010)

2.3.1.2.1. A Definition of Giftedness

A recent definition put forward by Subotnik, Olszewski-Kubilius and Worrell (2011) offers a contemporary, comprehensive, and most importantly, valuable approach to the definition of giftedness in relation to this study.

According to Subotnik, Olszewski-Kubilius and Worrell (2011, p.3), giftedness is:

“...the manifestation of performance that is clearly at the upper end of the distribution in a talent domain even relative to other high-functioning individuals in that domain. Furthermore, giftedness can be viewed as developmental in that in the beginning stages, potential is the key variable; in the later stages, achievement is the measure of giftedness; and in fully developed talents, eminence is the basis on which the label is granted.”

This conception can be considered advantageous as it considers giftedness from several different perspectives. Firstly, it recognises giftedness is relative; not just to individuals with extraordinary abilities but also those with ordinary abilities. Secondly, the definition sees that giftedness is also about the evidence of potential to create as much as the actual creation itself;

“Too often, giftedness is viewed exclusively as a trait that is manifested in high performance on ability tests and something that is inborn, fixed and changeable.”
(Olszewski-Kubilius and Clarenbach 2012, p.9)

The inclusion of *potential to achieve* within the definition is critical as some students may have the potential to achieve but that may not always be “evoked by the school environment” (Van-Tassel-Baska 2005, p.364).

This facet is also important, especially when considering that for some students their ability may not be easily recognised, or identified through traditional forms of testing.

This definition also recognises the domain-specific nature of the construct. In this view, “giftedness is the manifestation of general intelligence within specific domains at very high levels” (VanTassel-Baska, 2005, p.358). These domains may include verbal, mathematical, scientific, artistic and social, given a superior level of general ability (VanTassel-Baska, 2005). This definition contrasts somewhat from the traditional view outlined in an earlier section (see 2.8.1) as it links giftedness to a specific domain of functioning, rather than the general intelligence (‘g’ factor model) which views giftedness as common across all academic domains (Subotnik, Olszewski-Kubilius & Worrell, 2011; Sternberg, Jarvin & Grigorenko, 2011). VanTassel-Baska (2005) maintains that the domain-specific model of giftedness offers a great deal of utility as it embodies how giftedness works in the real-world. Additionally, such a view has implications for the application of a talent development paradigm in the realms of identification, instruction and assessment because of the capacity to make appropriate correspondences between programmes for the gifted, as well as for the purposes of career planning and development. As giftedness is considered malleable, ‘giftedness must be cultivated and sustained in a way of training and interventions focusing on the development of domain-specific skills’ (Subotnik, Olszewski-Kubilius & Worrell, 2011).

By holding a domain-specific conceptualisation of giftedness and of talent development, one can elicit a deeper understanding of how to nurture the abilities of students who may have the potential for high levels of ability but have barriers in place preventing them from fully developing their talents. Within this model, the ultimate goal is to transform potential talent during youth into outstanding performance and innovation in adulthood.

Finally, this conception most clearly mirrors how giftedness works in the real-world. As individuals tend to narrow their focus and specialise in their professional lives in order to perform at high levels within their chosen domain;

“High g-factor intelligence which is not linked to a specific domain of functioning in the modern world may bring great satisfaction to the individual but may make little impression on the society that has spawned it” (VanTassel-Baska, 2005, p.361).

2.3.1.2.2. The Irish Context

As outlined in the previous chapter, within Irish educational policy, the term *exceptionally able* is used to describe gifted or high-ability students. The most recent publication to address the needs of exceptionally able students arose within the publication of guidelines for teachers by the NCCA in 2007. To a large extent, the guidelines mirror the identified areas contained in the Marland Report (1972).

The definition by the NCCA emphasises the point that an individual could be gifted in one area but not in another which is in agreement with the domain-specific theories of giftedness (Subotnik, Olszewski-Kubilius, & Worrell, 2011; VanTassel-Baska, 2005; Brody & Stanley 2005).

Under the NCCA (2007, p.8) guidelines, *exceptionally able students* are defined as those who demonstrate very high levels of attainment in one or more of the following areas:

- General intellectual ability or talent
- Specific academic aptitude or talent
- Visual and performing arts and sports
- Leadership ability
- Creative and productive thinking
- Mechanical ingenuity
- Special abilities in empathy, understanding and negotiation

The NCCA suggest that “...in every school there will be a group of students who require extended educational opportunities, regardless of how they compare to exceptionally able students in other schools” (2007, p.8). The NCCA advise that within every school population between 5-10 percent of students will require “opportunities for enrichment and extension that go beyond those provided for the general cohort of students” (2007, p.7). Yet, as stated previously, to date no direct funding has been made to schools to provide services for these students (O’Reilly, 2012).

2.3.2. Identification

As the number of conceptions of giftedness has grown in recent years, a debate has emerged as to the most appropriate means to identify the construct. The identification process can be challenging as it has a direct relationship to the corresponding definition of giftedness and how persuasive one considers that to be. As a result of the lack of professional and academic consensus, the identification process can seem “confusing” (Pfeiffer, 2002, p.35), which has led one of the field’s key figures in the field to label it an “inexact science” (Tannenbaum, 1983 p.342). Even with the confusion which surrounds the process, it is an endeavour that must be undertaken if the label is to be attributed to an individual.

The following sections address the strategies typically used in the identification process. In particular, the Talent Search model which is used at CTYI is identified and explained.

Subsequently, the link between the Talent Search and programming practices is explored. Finally, the key issues around identifying students from under-represented backgrounds, and in particular, students from areas of disadvantage are highlighted.

2.3.2.1. Strategies for Identification

Essentially, there are two different strategies that can be undertaken in the identification process; quantitative and qualitative. Ryser (2004, p.24) coherently differentiates between the two;

“Assessments that are considered qualitative use words to describe and understand an individual’s strengths or other characteristics, while quantitative assessments use numbers to describe and understand an individual’s strengths or other characteristics.”

The table below (Table 2.2) lists the commonly used quantitative and qualitative assessment tools used in the identification of giftedness.

Strategies For Identification	
<i>Quantitative Assessments</i>	<i>Qualitative Assessments</i>
Achievement, Aptitude and Intelligence Tests	Portfolios, Interviews, Observations

Table 2.2 Commonly used quantitative and qualitative strategies used in the identification of giftedness (Ryser, 2004)

Traditionally, quantitative methods, such as IQ testing, have been used to identify students as gifted. Such methods can take the form of achievement, aptitude and intelligence testing. Aptitude tests are seen as the preferred method of assessment for identifying giftedness quantitatively as they can measure or predict “subsequent performance in a domain” (Ryser, 2004, p.34) with achievement tests only measuring “the effects of instruction” and intelligence tests “sampling behaviours already learnt in an attempt to predict future learning” (Ryser, 2004, p.34).

The more recent conceptions of giftedness which have emerged from the field within the last fifty years have led to a subsequent reconceptualisation of the various methods of identification. Essentially, this has meant the movement away from the sole reliance on quantitative measures, to the increased emphasis on more qualitative methods (Swanson,

2010; NCCA, 2007; VanTassel-Baska, 2005; Ryser, 2004). Ryser (2004) suggests three types of qualitative assessments; portfolios, interviews and observations with Swanson (2010) adding 'performance tasks' to the list of possible strategies. Borland (2004, p.20) also includes the use of "open-ended teacher referrals instead of checklists" as a proposition that identification should be seen as a long-term process extending over a couple of months, rather than a once-off event. The advocates of such qualitative tools argue that such methods provide a more flexible, sensitive and subjective approach to identification. Borland (1997, p.16) argues that this subjective component of qualitative measures is gaining momentum when identifying students;

"The idea that human judgement, as subjective as it might be, may prove to be a more valid means of assessing some constructs of interest to educators than are objective measures is steadily gaining ground".

Overall within the field, there has been a call for the application of multiple criteria which combine quantitative and qualitative criteria when identifying students, so as to augment (and not abandon) the use of standardised assessments in identifying this special group of students (VanTassel-Baska, 2005; Borland, 1997).

2.3.2.2. Identification at CTYI- The Talent Search

At CTYI, a quantitative-based strategy is used to identify giftedness. While in some cases, teachers may nominate students for assessment, and while parental consent is necessary for a student to sit the assessment, ultimately, the score on the assessment determines the eligibility for the Centre's programmes. Subnotnik, Olszewski-Kubilius, and Worrell (2011) contend that the sole use of standardised assessments may be justified in certain circumstances, such as when identifying students for supplemental learning opportunities as they can be "...a practical solution for identification...in a non-school setting" (Subotnik, Olszewski-Kubilius & Worrell, 2011, p.35).

Sternberg, Jarvin and Grigorenko (2011, p.17) list a number of suggestions why psychometrically based constructs (e.g. the SAT) play a major role in the identification of giftedness. They argue that psychometric forms of testing are beneficial, as they are objective measures that provide a precise measure of students' abilities. Psychometric tests also provide clear cut-off points and are able to clearly distinguish "those who make it from those who did not" (p.17). Additionally, such forms of tests are familiar to those who run gifted programmes, and can be carried out in a cost-effective manner. Finally, such objective measures have a history of perceived successful use in identifying the gifted.

The adopted identification and programming strategy within CTYI originates from the Talent Search concept pioneered by Julian Stanley in the 1970's. The Talent Search aims to identify exceptional talent in a specific domain through the administration of a test designed for older students than those taking the test. Normally, this test would be suitable for students two-to-four years older than the students taking the test. By using a standardised test designed for older students, one can determine the degree to which younger students' abilities exceed those that cannot be measured using tests for their own age (Matthews, 2008; Charlton, Marolf, & Stanley, 2002). This principle of using a standardised test designed for older students to determine the degree to which younger students' abilities exceed those that can be measured using tests for their own age is referred to as out-of-level testing (Charlton, Marolf, & Stanley, 2002).

At CTYI, and in order to qualify for older student programmes, students must sit the Preliminary Scholastic Aptitude Test (PSAT). The PSAT can be considered an out-of-level test as it is usually administered to 17 year old college-bound American students. The PSAT assesses students in relation to three areas; critical reading, mathematics and writing skills. By looking at each of these areas separately, differentiation is made

between an individual's relative strengths and weaknesses in the different areas of intellectual reasoning ability. In turn, this can provide a more useful and comprehensive picture of individual student abilities which can be utilised when advising on educational programme placement (Olszewski-Kubilius & Thomson, 2014).

2.3.2.3. Identifying the Gifted Disadvantaged

The under-representation of students from socio-economic disadvantaged areas in gifted programmes is a topic that occupies much space and discussion throughout the literature (Koshy et al., 2011; Borland, 2008, 2004; Chart, Grigorenko & Sternberg, 2008; Pfeiffer, 2002).

Borland (2004, p.21) asserts that "identification is at the crux of the problem of underrepresentation". He contends that traditional standardised testing procedures that are often used for entry into academic programmes privilege students from more affluent backgrounds and reflect the values and interests of the largely White professionals who created them (Borland, 2004, p.16). According to this view, the use of standardised tests is thus considered "inappropriate and biased" and has led to the continuation of inequitable identification practices, resulting in some groups of minority students being identified less often as 'gifted' than their more affluent counterparts (Passow & Frasier, 1996; Hadaway & Marek-Schroer, 1992).

Chart, Grigorenko, and Sternberg (2008, p.287) remark that although psychometric tests can be a beneficial tool for identifying students for programming opportunities, they agree that when identifying students from under-represented groups, they should be used flexibly. VanTassel-Baska (1998) makes an interesting suggestion of using traditional forms of testing to identify students but adopting less stringent cut-off points for entry into programmes for students coming from areas of poverty. Olszewski-Kubilius and

Clarenbach (2012) believe that it may also be worthwhile to retest students to qualify for programmes at a later time if they are not successful in the first instance.

In order to address the disproportionality that exists in the identification process, there has been a call from within the field for “multiple methods to find students from underrepresented groups” (Swanson, 2010, p.133) with Pfeiffer (2002, p.43) arguing that “a single test score should never be used alone in making a diagnostic or classificatory decision”.

2.3.2.3.1. The Role of the School Authorities in the Identification Process

The various school authorities have a vital role in identifying high-ability students, with *teacher referral* being an advocated identification tool of a potentially gifted student into a gifted programme (VanTassel-Baska 2008; Borland, 2004). While Swanson (2006) concedes that teachers in some instances may block the identification of low-income gifted learners due to traditional and less experienced notions of giftedness, within Aiming High, the teachers and schools are advocates or *gatekeepers* to the programme and play a crucial role prior to the CTYI assessment (Guggisberg & Guggisberg, 2010).

2.3.3. Gifted Programming

This section focuses on the role of gifted programmes in catering to the needs of high-ability students. As the focus of this research centres around students who are taking part in a summer programme at CTYI, there will be a specific focus given to summer programmes in catering to the needs of students, and in particular, their role as an intervention strategy for highly-able students coming from socio-economic disadvantaged backgrounds. This section will conclude with examples of various programmes which target students from low-income backgrounds in order to frame the Aiming High initiative amongst other international programmes. These examples aim to provide interesting insights into a number of current provisions which concentrate on catering to the needs of the targeted group of students. These examples further intend to add context and to provide a backdrop for the detailed description of the various components of the Aiming High programme which will be explained further in Chapter Four (The Context of the Case).

At CTYI, two main instructional strategies are used throughout CTYI's older student programmes; acceleration and enrichment. With acceleration activities, students learn at a pace which is commensurate with their learning ability, thereby giving students the opportunity to accelerate their learning by offering university-style experiences over the duration of a summer course. Research supports the efficacy of acceleration as an appropriate strategy for gifted learners (Olsezweski-Kubilius, 2008b; Colangelo et al., 2004) Subonik, Olszewski-Kubilius and Worrell (2011, p.24) deem the findings from research relating to the effects of acceleration "overwhelmingly positive". Such positive outcomes include attitudinal outcomes in terms of developing a better understanding of the nature of their academic abilities (Brody, 1998; VanTassel-Baska, 1989), and reporting higher educational and career aspirations (Benbow & Arjmand, 1990; Brody, 1998; Burton, 1988) and an advanced level of academic achievement subsequent to their talent

search participation (Subotnik, Olszewski-Kubilius, & Worrell, 2011; Barden & Durden, 1993).

The CTYI older student courses are also enriching, and supplement the typical school curriculum by offering topics which are usually not covered within schools (Subotnik, Olszewski-Kubilius, & Worrell, 2011). Enrichment activities offer students the chance to undertake challenging coursework that goes beyond the school curriculum, while also providing unique academic experiences that schools generally do not provide. These opportunities include working in research labs or doing field work, extended contact with intellectual peers and the early opportunity to preview college life (Olszewski-Kubilius & Clarenbach, 2012, p.11).

In general, the research from the field supports the positive effects of gifted programmes on students' achievement whether they are enriching or accelerative in nature (Subotnik, Olszewski-Kubilius, & Worrell, 2011; Olszewski-Kubilius & Lee, 2004).

Supplemental educational opportunities can help foster talent development, provide academic challenge, and may present opportunities for students' to meet other intellectual peers. According to Olszewski-Kubilius and Lee (2004), out-of-school programmes can also have the potential to enhance an individual's self-confidence, motivation to achieve, and personal responsibility for learning. This in turn, may enable students to seek and succeed in other subsequent and rigorous academic courses after the programme's completion.

A study by Hertzog (2003) explored the impact of a gifted programme from the perspective of the participating students using qualitative methods. The study focused on students retrospectively reflecting on their experiences and the impact which the courses had on their lives. The results indicated that participation in the programme had an

“overwhelmingly positive impact on their lives” (p.139), and while students felt negatively about being labelled as ‘gifted’, overall the benefits outweighed the costs. While pull-out academic programmes may be short in length, Hertzog (2003, p.140) explains that they may be “life-altering”, in that, they give students the opportunity to work hard, to participate in courses that go beyond what is offered in schools, and provide students with the chance to meet other students with similar interests. The programmes were also cited as instrumental in preparing and managing student expectations in relation to university.

From the perspective of the parents, Olszewski-Kubilius and Lee (2004) examined the effects of a Saturday enrichment programme on students’ talent development. In this study, parents perceived there to be positive outcomes in relation to their child’s academic growth. Specifically, parents felt that students gained academic skills or new knowledge, an increased level of academic confidence, a greater motivation to learn, and a heightened interest in the subject area. The parents also believed that students benefited more academically than socio-emotionally from participating in the programme.

2.3.3.1. Summer Programmes

Summer academic programmes are a common type of programming offered to students of high-ability. While these programmes may be short in length running for two or three weeks, they have several defining features such as: an accelerated and enriched curriculum; dedicated staff; peer interaction with others of similar ability; and a supportive climate for growth (Olszewski-Kubilius, 2003; Enerson, 1993). Matthews and McBee (2007) claim that despite the short length of the programmes, behavioural changes can take place relatively rapidly once the learning environment has been altered.

A study from Enerson (1993) investigated the experiences of students taking part in a summer residential programmes for gifted students. Enerson (1993) applied the principles of phenomenology and used interviews in order “discern how a group of students saw and interpreted the value of summer programs” (p. 169). These interviews were conducted on campus while students were taking part in the programmes. The findings indicated that the programme environment offered students the chance to meet the psychological, academic and social needs which were un-catered for in the normal school setting.

Hany and Grosh (2007) also put forward that there is substantial anecdotal evidence to suggest that even short encounters with peers who have the same interests, passions, and intellectual level can positively influence gifted adolescents’ self-concept and life goals. They maintain that if gifted students in a summer programme are able to recognise that they are capable of solving complex problems; their aspiration level should immediately rise thus motivating them to pursue demanding school subjects and study programmes.

A report from the Center for Talented Youth at Johns Hopkins University which was compiled using data from thirty years of research studies outlined the benefits of the summer programmes for students at CTY (CTY, n.d.). According to the findings, students benefit three ways from programme participation; academically, socially and personally. These benefits for students taking part in summer programmes align with similar findings from VanTassel-Baska (1984). In the study from CTY, academic benefits are weighted highest, followed by social and finally by personal. The academic benefits cited include the ability for students of being able to experience college life; achievement gains in the subject area studied, and improved thinking and study skills. The social benefits described relate to the feeling of a sense of belonging and the creation of friendships with peers with the same intellectual abilities as themselves. As the vast majority of students would

stay residentially on the summer programmes, many of the personal benefits relate to increased levels of maturity and independence for students who were living away from home. The report also highlights that having the opportunity to be immersed in one particular subject for a number of weeks is both highly challenging but at the same time, highly stimulating. In light of these research findings, Kaul (2014) suggests that it is necessary to be mindful that historically CTY's summer programmes have served students from higher socio-economic groups and that the cost of the courses is presently over \$3500 to attend. Therefore, these reported effects may not be necessarily representative of the effects for low-income students.

For promising learners coming from disadvantaged backgrounds, Olszewski-Kubilius and Lee (2004, p.156) believe that students from disadvantaged backgrounds can benefit greatly from participation in summer programmes, as such programmes can "...ameliorate the effects of poverty or isolation, and may uniquely contribute to the process of talent development by exposing gifted students to academically challenging coursework and cultivating social support from gifted peers".

Lee, Olszewski-Kubilius, and Peternel (2009), explored the long-term effects of an enrichment programme for low-income students focusing on the areas of maths and science by using interviews with both students and parents of the programme. They concluded that there were a number of positive outcomes for students' participating in the programme. By taking part in the courses, students were able to improve their academic skills while augmenting their content knowledge and at the same time, gaining hands-on experiences. Socially, students were able to expand their social networks with new high-ability peers and thus, were able to receive more support for higher levels of achievement. Furthermore, such academic experiences were also found to raise both student and parental expectations in relation to succeeding at higher levels of education.

In terms of negative findings, there was no peer pressure felt by students taking part, although some students did feel challenged in balancing social encounters with their peer groups outside of the programme.

Using the study carried out by Lee et al. (2009) as a springboard, Kaul et al (2015) proposed a model for promoting potential amongst low-income gifted students. The model highlights how parents and families, the programme itself (programme content and programme context) and the people involved (mentors, instructors, and peers) are the three key components which can contribute to positive outcomes for both parents and students. The model is interesting as it links the three critical components to the possible results relating to student participation. However, this model fails to recognise the role of other stakeholders outside that of parents and families, such as the role of the school authorities in promoting high achievement. The role of the school is considered important as this is the environment where students spend the majority of their time and gain critical learning experiences. As a result, such an intermediary should be included, as in the case of Aiming High (see section 1.5.2). Furthermore, no negative findings were cited in relation to Kaul's (2014) study which is somewhat surprising.

In the report from CTY Johns Hopkins (CTY, n.d.) which compiled an overview of the benefits for students participating in summer programs at CTY, academic, personal and social benefits are also cited for students coming from under-represented backgrounds. Low income students demonstrated similar achievement gains and reported more pervasive social, cognitive and academic benefits. A higher percentage of the under-represented students rated open-mindedness, exposure to diverse backgrounds, setting higher academic goals, and preparation for college as benefits of their summer programme experience compared to the overall CTY population (Kaul, 2014). Kaul (2014, p.61) emphasises that comprehensive studies are needed into summer programmes

which target students from disadvantaged backgrounds, as “...limited research has been conducted on gifted programs with a summer component for low-income learners and no research examines the effects of summer-only programs for economically disadvantaged students”.

This section of the literature review aimed to illuminate the fact that while summer programmes are short in duration, research findings have consistently shown that even the application of minimal changes such as the provision of challenging and advanced curricula has been found to significantly impact on the achievement profiles of students (Swanson, 2010; VanTassel-Baska, 2010). By engaging with peers who share similar values and interests, students can develop an increased focus on academics and a motivation to achieve (VanTassel-Baska, 2010).

2.3.3.2. A Selection of Academic Programmes Focusing On Low Income, High Ability

Students

Olszewski-Kubilius and Clarenbach (2012, p.12) discuss a number of 'current successful models' which target learners from disadvantaged backgrounds, where "success" is defined as a "general term which enables more students from under-represented groups to increase their academic achievement and succeed at every level of schooling". While each of the specified programmes have largely been effective in their aims, Olszewski-Kubilius and Clarenbach (2012) make an appeal to identify other successful programme models that may work with high-ability, low-income students. A number of programmes are described in the section below and although they each vary in relation to their aims and design, they have a shared interest in developing the academic talent of students. Some of the programmes involve partnerships between universities and school districts while others focus on establishing relationships between universities and non-profit organisations. The examples below come from two different countries, the United Kingdom which is geographically our nearest *neighbour* and a society which closely resembles ours, and the United States, where the large majority of literature, research and programmes have been developed. These vignettes are not intended to be exhaustive of the programmes which target this group of students; however, they aim to give a flavour of the current provision for this group of promising learners.

United Kingdom

Within the United Kingdom, there is little educational provision made for gifted and talented students. It therefore, extends on, that there is little in the way of opportunities for students for gifted students from socio-economic disadvantaged backgrounds. Yet, two programmes have been identified which target young promising learners.

URBAN SCHOLARS PROGRAMME

The Urban Scholars Programme was launched in 2000 by the Brunel Able Children's Education Centre in London, England. This programme targets 'urban' students aged between 12 and 16 years from areas of social deprivation around the capital to take part in academically challenging classes in areas such as English, Mathematics, Critical Thinking and Science. The programme began initially to provide students who were unable to fulfil their potential in school with an outlet to engage with students of a similar ability, and in the process it hoped to raise their levels of academic achievement and aspirations. With the classes being held in a London University on one Saturday a month, the project aims to increase engagement with learning, raise aspirations, and to connect students who often have no familial experience of higher education to this environment. In terms of identifying students, the participating schools associated with the initiative are given a list of criteria which should be used to assist in the nomination process. Such criteria include; choosing students who have the potential to eventually embark on university studies; pupils who find schoolwork not sufficiently challenging; students who are analytical thinkers or who have the ability to solve complex problems; and students who have or recently had an entitlement to free school meals. The guidance information from the programme also states that it is important that schools identify students who are experiencing a level of disadvantage which impacts on their performance within school (Koshy et al., 2011, p. 12-13).

There have been both qualitative and quantitative studies conducted on the programme. The research findings from these studies indicate that overall students who took part in the programme gained an improved attitude towards school and learning. The majority of the students felt that they gained critical skills from which "they were able to approach a diverse range of situations more analytically" (Koshy et al., 2011, p.31). There were also

positive findings in terms of inter-generational mobility with just less than 50 percent of students stating higher aspirations than their parent's occupation (Koshy et al., 2011).

GENERATING GENIUS

Generating Genius works with young people from disadvantaged backgrounds who are talented in STEM (Science, Technology, Engineering and Maths) areas. The organisation which is located in London, aims to provide support to students who have no history of higher education in their families to enter the United Kingdom's top universities. No research studies have yet to be published relating to the initiative.

United States

In the United States there is a broader range of programmes targeting high ability students from areas of disadvantage. Although students from areas of poverty and disadvantage continue to be under-represented within gifted programming, the United States is the forerunner for the provision of programmes and strategies targeting this population. Below are some examples of the programmes which currently exist for this group of students.

PROJECT EXCITE

Project EXCITE provides supplemental learning opportunities for minority groups who are often under-represented in advanced maths and science classes in secondary (high) school. The programme is a university partnership between the Center for Talent Development (CTD) at Northwestern University and local school districts within Illinois. In terms of identifying students, students must meet a number of criteria in order to be considered for this learning opportunity. Such criteria includes; coming from an under-represented minority group within mathematics and science; coming from a family which has limited experience of higher education; demonstrating the ability to think critically and to engage in problem solving; and having the ability to work beyond their current

grade level (Olszewski-Kubilius, 2006). In relation to the programme objectives, Project EXCITE was set up with a number of short and long term goals. In the short-term, the programme aims to nurture students' interest and talent in maths and science while building their confidence. In the long-term, the programme hopes to eliminate any discrepancies in the achievement levels between minority and nonminority students. To achieve these aims, the programme runs courses after-school, on weekends and throughout the summer. To date, there has been a number of research studies carried relating to the impact of Project EXCITE (Lee, Olsezewski-Kubilius & Peternel, 2009; Olsezewski-Kubilius, 2006; Olsezewski-Kubilius et al, 2004). In one study which examined the experiences and perceptions of students and parents of the programme after six years of participation, Lee, Olsezewski-Kubilius and Peternel (2009) reported the positive impact of the programme on the participating students. By taking part in the classes, the students were able to enhance their interest in the areas of Maths and Science. Other positive student outcomes included; improvements in academic performance, expanded social networks and enhanced support for high achievement. Few negative effects were cited, although at times students found it challenging to negotiate time between the programme and their social lives outside of the programme.

PROJECT PROMISE

The University for Young People's (UYP) Project Promise Program, is a university-based summer enrichment programme based in Waco, Texas, designed to enhance the talent development of gifted students from Grades 4-12 (approximately 10 to 18 years old) . Once identified, the Project Promise students, who are a subset of UYP students, are given the opportunity to attend a summer programme annually under a scholarship programme until the summer before their final year of high (secondary) school. For entry into the programme, students can be identified in a number of ways either by their local school district or through the university programme itself. The accepted entry methods include:

parent and teacher recommendations; through demonstrated potential in a specific domain; or for those students who score in the top 15 percent in an achievement or aptitude test. The summer programmes run for a period of between three and four weeks.

The overarching goal of Project Promise is to “develop students’ aspirations and readiness for higher education” (Kaul et al., 2015). In terms of research studies, Kaul (2014) investigated the longitudinal effects of participation in Project Promise. Through survey research, which was conducted with a sample of students who had taken part in the courses for three years or more, Kaul (2014) reported positive long-term effects with regard to the education and careers of participants. The participating students benefited academically in relation to choosing more advanced and challenging courses in school to prepare them for higher education. The courses also had instrumental benefits in influencing student’s decision to attend university. There were also positive findings relating to emotional, social and generational effects. Interestingly, the research found that the strongest impact for the students were the social relationships resulting from involvement in the programme. In particular, *mentors* had the profoundest effect on students. These individuals “took a personal interest in students’ outside family activities and family and positively reaffirmed the students’ abilities...” (Kaul et al., 2015, p.36).

JACK KENT COOKE FOUNDATION YOUNG SCHOLARS PROGRAM

This programme identifies students who are low income, irrespective of their race or identity, and gives them long-term financial support for private school tuition, summer-programme attendance, and other individualised special needs. The foundation is committed to supporting high-ability students from disadvantaged communities as such students are a “powerful and largely untapped resource” (Jack Kent Cooke Foundation,

2013, para.4). Two of the projects funded by the Jack Kent Cooke Foundation are outlined below.

CAMP LAUNCH

Camp Launch is a two-week summer residential programme for low income, high ability students. Started in 2012, it is run by the Center for Gifted Education in the College of William and Mary, Virginia, and receives funding from the Jack Kent Cooke Foundation. The Camp works with local schools to identify students who meet specified criteria. Such criteria include; students who come from a family whose income falls below a certain threshold set by the Center; students who have scored in the upper tenth percentile in a nationally normed aptitude, creativity or achievement test; and students who have been recommended by their class teacher or school gifted co-ordinator to participate. All recommendations must be accompanied by evidence of performance such as, portfolios or work samples. The curriculum focuses on the STEM subjects of Science, Technology, Engineering and Maths while also developing student skills in writing and personal development. As well as providing a range of content areas for advanced instruction, the project also has the aim to developing students towards a goal of university education and the skills needed to realise such an ambition. To date, there have been no published research studies on Camp Launch. However, in a working document from the Center, a study is currently exploring the impact of the camp on students six months after programme participation (Mihyeon & Dockery- in press). Preliminary findings indicate a number of beneficial outcomes relating to students feeling more confident in their own academic capabilities, while also having a greater work commitment to achieving future goals (i.e. developing a vision for college) and feeling an improvement in their social relationships when they returned to school.

CTY SCHOLARS

Launched in 2004, the Johns Hopkins University CTY Scholars Program (in association with the Jack Kent Cooke Foundation) seeks to identify high potential students during the initial years of high (secondary) school. In terms of eligibility criteria for this programme, students must meet a number of requirements. First, students must qualify for CTY's programmes through the Talent Search. Second, students must be from a traditionally underrepresented student group in higher education. Third, students must attend eighth grade in public or charter school. Fourth, students must come from a family who has an income below a certain threshold set by the Center, and finally students must live in one of the geographical areas selected by the donors. As part of this four-year scholarship programme, students are given the opportunity to strive to the highest levels of achievement through participation in the summer programmes, distance education courses, a mentoring programme and by liaising and seeking academic support from a personal educational advisor (CTY,n.d.). To date there have been positive findings in relation to the initiative;

“Results from the first group of scholars graduating from high school document the powerful impact on student’s lives and the real-world accomplishments they have achieved as a result of these intensive on-going personalised experiences and opportunities” (VanTassel-Baska, 2007, p.5).

The various programmes outlined above illustrate that there is provision being made for high-ability students coming from under-represented backgrounds in a number of different ways. Even though certain aspects of these programmes vary from the objectives and design of the Aiming High initiative, they all share a common thread in which they aim to place students on a path of talent development.

2.3.4. Connecting the Definition, Identification & Programming Strategies

The most relevant consideration which should underpin discussions about definitions of giftedness, strategies for identification, or curriculum decisions in relation to programming structures is the creation of a coherent link between all three elements. Renzulli (2002, p.4) echoes this by declaring that fundamentally there should be, “a logical relationship between definitions on the one hand and...identification and programming practices on the other”.

At CTYI, there is a clear relationship between the conception of giftedness, identification practices and the adopted programming strategy. With regard to a definition, a domain-specific conception is applied. This conception explained in the above sections (see section 2.8.2) holds the most promise for the promotion of talent development and “...has the capacity to make the appropriate correspondences between aptitudes and interventions” (VanTassel-Baska, 2005, p.358). Identification and programming decisions at CTYI are linked to the Talent-Search model which aims to discover exceptional talent in a specific domain. In order to identify domain-specific talent, above-level testing is carried out in order to determine how much a child’s level of performance differs from the performance of other above-average students at a given age or year-group. A key and pivotal feature of this model is the *optimal match* principle. This principle focuses on achieving *optimal match* between tested ability and the level of educational programmes provided;

“This optimal match is obtained by accelerating students as necessary by adjusting and tailoring the pacing of material to the abilities of the students. The talent-search model hypothesizes that motivation; task commitment and perseverance are facilitated and engendered by the appropriate levels of challenge achieved through this optimal match.” (Subotnik, Olszewski-Kubilius, & Worrell, 2011, p.28)

There has been much research carried out on the model since its creation in the 1970's. VanTassel-Baska (2005, p.370) argues that "the success of domain-specific curriculum is hard to dispute, given a 25-year history of effectiveness"; with Olszewski-Kubilius and Thomson (2014) noting that such a model is well established and well researched within the field.

The programming structure with three older student programmes at CTYI (see section 1.5.3) is in place to cater to all levels of academic ability. This gives any student who has the desire to participate in courses at CTYI the opportunity to do so if they wish. This programme differentiation is crucial as VanTassel-Baska (2005) suggests that a central challenge in programming decisions is deciding on how a broad group might benefit from a particular intervention so as to ensure differentiation of instruction in the delivery of that intervention to ensure that students at the top of the group are adequately challenged and those at the bottom are not made unduly anxious.

The Talent Search has been criticised for the lack of diversity "among students who choose to participate in it" (Olszewski-Kubilius & Thomson, 2014). The main argument here is linked to the belief that standardised tests reproduce the inequalities within academic programmes; yet VanTassel-Baska (2005) suggests that the use of such instruments for the purposes of identification can be considered suitable in the context of special educational offerings, such as summer programmes, rather than solely in a school context where the use of multiple criteria for the purposes of identification would be viewed as more advantageous.

The entry process into the Aiming High initiative as well as the three older student programmes was explained in Chapter One (see section 1.5.2). It is important to state at this point, that in contrast to other programmes focusing on high-ability, low-income students (see section 2.10.2), there is little guidance offered to schools in relation to the

nomination process and furthermore, there is no difference in testing cut-off's for students coming through the Aiming High pathway to students coming through the traditional entry-route.

This section of the literature review outlined a number of key conceptions of giftedness and strategies for identifying the construct. While no definition of giftedness has gained unanimous consensus from academics and practitioners within the field, the lack of a universally agreed conception of giftedness should not be considered negatively as the purpose of the definition is a matter of establishing its link in light of the identification strategy and the programming options.

2.3.5. The Role of Parents and Schools

Within the context of this study, the role of parents and the various school authorities are important to consider as they are key intermediaries who work *behind the scenes* with students through the stages of nomination, testing, and during the programme itself. Although these two groups are not involved in the delivery of the programme, these stakeholders are able to observe and gain first-hand knowledge as to how students experience the initiative from start to finish, and therefore can offer interesting insights into the focus of the research.

2.3.5.1. The Role of Parents

As primary caregivers, parents possess a fundamental role in supporting the academic ability of their children. Burney and Beilke (2008, p.187) assert that, poverty may be a “powerful barrier” to student achievement as families target meeting basic needs (e.g. food, shelter) over other higher level needs (e.g. student achievement). The lack of access to financial resources within families should not be labelled “lack of concern” on the part

of the caregivers; rather, such a situation encapsulates the “reality that many low-income families do not have the luxuries or freedoms that accompany the middle class”.

A study from VanTassel-Baska (1989) explored the role of the family in the lives of gifted disadvantaged adolescents. From the case studies undertaken, it is clear that the family and the parents in particular, can play a great role in encouraging abilities, and providing support. According to the study, parents represent “the critical element” in their children’s current and future talent development and can also be perceived as *gatekeepers* for outside school learning opportunities, such as university experiences;

“The parents appear to represent the critical element in their children’s current and future talent development. Even though many of them were not well educated or financially comfortable, they exerted a powerful influence over their children’s lives. Opportunities such as school programs and university experiences were accessed through the parents who acted as gate-keepers for such activities. No individual or institutional influences outside the family emerged as powerful in the lives of these adolescents” (VanTassel-Baska, 1989, p.26).

Bowers-Brown (2006) claim that the attitude of the parents plays a large role in determining whether young people progress through the education system, so gaining their support is crucial. Swanson (2010) comments that it is not unusual for parents from low-income homes to have concerns as to the benefits of gifted programmes, and these concerns can include: misconceptions about the purpose of the gifted programme; a concern over the high course fees; or the fear that the programme will create negative changes in the child.

While parents from disadvantaged areas are not as likely to have experience with higher levels of education, or may not understand what is involved in developing their child's talents, absence of interest, low expectations or lack of aspirations for their children should not be assumed (Olszewski-Kubilius & Thompson 2010; Swanson, 2010).

As parents possess a vital role in the talent development process, it is therefore recommended that family involvement should be incorporated into any support system so as to increase the effectiveness of the intervention strategy (VanTassel-Baska, 2010; Burney and Beilke, 2008).

2.3.5.2. The Role of the School Authorities

Often the literature relating to the role of schools and teachers regarding high-ability students from low-income families' centres on addressing commonly held misconceptions regarding such a group (Swanson, 2010; Coleman & Southern, 2006; Siegle, 2001).

For students in areas of disadvantage, parents and family members often have less experience of the education system, and as a result, the role of school authorities can become heightened in sharing this information (Stormont, Stebbins & Holliday, 2001). McCoy et al (2014, p.xv) state that parents from disadvantaged backgrounds often lack the detailed information and insider knowledge regarding the higher education system and therefore, often can be helpless when advising their children on decisions regarding course and college choices. Olszewski-Kubilius, Grant, and Seibert (1994) therefore claim that, in such cases, it may be schools that are the primary influence on a child's talent development rather than the family, as they can often provide "opportunities unavailable in the family or in a community context" (VanTassel-Baska, 1989, p.30). VanTassel-Baska (1989, p.35) also acknowledges the role of schools and teachers labelling them "very

important” in the talent development process. According to VanTassel-Baska (1989), schools often give students the chance to access special learning opportunities while also contributing to the shaping of student self-perceptions and the building of competence within their academic lives.

2.3.5.3. Building an Integrated Relationship amongst Parents and Schools

Building a strong family-school connection is necessary in order to best serve the talent development of students. Guggisberg and Guggisberg (2010) advise that the cultivation of giftedness requires a collaborative partnership between teachers and parents (and/or guardians) in order to work towards the equality of opportunity and outcomes for all students. Olszewski-Kubilius and Clarenbach (2012, p.23) also believe in the need for an integrated response between schools and parents as to create a school “...culture that views parents and the community as partners in the education of their children and actively cultivates their input and participation”.

As it is clearly evident that parents and the various school authorities have a role of great importance in the talent development of young people, these stakeholder groups shall be incorporated into the data collection phases of the research with more information relating to each becoming clear in the Research Design chapter.

2.3.6. Peers and Other Students

The role of parents and the various school personnel is central to the talent development of students. The role of other students, or peers, in such an educational setting can also be fundamental to the talent development process. One of the most defining features for students engaging with learning opportunities outside the traditional classroom setting is the opportunity to be surrounded by a diverse group of peers from different backgrounds, and perhaps even different countries. Olszewski-Kubilius and Lee (2004, p.157) suggest that students from disadvantaged communities can benefit from peer interaction and as such gives the opportunity to “augment social networks and obtain increased social support” which may help to ameliorate the effects of poverty and isolation. As well as potentially expanding worldviews, and challenging mind-sets, being surrounded by an assorted group also facilitates opportunities for rich discussion and challenge for all those involved (Olszewski-Kubilius & Clarenbach, 2012).

There has been interesting research conducted which considers if gifted students feel stigmatised by their school classmates as a result of their giftedness. A study from Coleman and Cross (1988), report that gifted students themselves did not feel different to others, rather, gifted students felt that it often others who made them feel different either academically or socially. As a result of this perceived stigma, some gifted students altered their behaviour in order to “camouflage their differences” (p.55). Kerr, Colangelo and Gaeth (1988) maintain that although participants perceive their giftedness positively in terms of personal growth and academics, interestingly, the same participants viewed giftedness negatively in terms of social relations with others. In a later article, Coleman and Cross (1993) assert that gifted adolescents who feel threatened by a potentially stigmatising situation or occurrence may create ‘social coping strategies’ in which to deal with the perceived stigma. Such strategies include managing the information which is made available to others about themselves and thus, minimising any potential stigma

from the situation. An interesting suggestion is made by Tannenbaum (1983) in terms of tackling the stigma which gifted students reported feeling. He suggests that “a climate of social acceptance has to be created within schools and in communities so that the gifted will want to realise their potential rather than express their exceptionalities” (p.466).

2.4. Conclusion of the Literature Review

This chapter comprises of two parts. Part one focused on contextual literature, most notably Irish educational policy initiatives which aim to reduce levels of educational disadvantage for lower socio-economic groups while at the same time, increasing the participation levels of these groups within the Irish higher education system. The second section outlined a number of conceptions of giftedness, strategies of identification as well as different programming strategies which cater to the needs of high-ability students. The final part of the review identified and explained the important role of schools and parents in the talent development process, and how there is a need for an integrated response from both of these intermediaries in order to address the academic and social needs of students. The final section of this chapter considered the role of peers and the potential perceived stigma which gifted students may feel amongst other students.

The next chapter moves on to address the research design and methodology of the study.

Chapter 3- Research Design

3.1. Chapter Introduction

This chapter will address the research design for this study.

The chapter will be divided into a number of sections. The first section will outline the research questions which guide the exploration of the study. In light of these questions, the rationale for the application of a qualitative lens to guide the research and as a means to answer these questions will subsequently be put forward before a detailed account of the research design of the study shall be outlined. The *five phase model of research design* presented by Denzin and Lincoln (2011, p.12) guides the organisation of this chapter. According to this model, there are five key phases of a research study; *the role of the researcher, the theoretical paradigm, the research strategy* (or methodology), *the research methods and the analysis technique* implemented. Each of these facets will be discussed individually as shaping forces within the study's design before the chapter concludes with additional elements to be taken into account within the research process. Such issues include accessing participants, ethical factors, and the audience for the research. Finally, the criteria for evaluating the trustworthiness of a study are examined.

Figure 3.1 provides an overview of the various sections of the chapter.

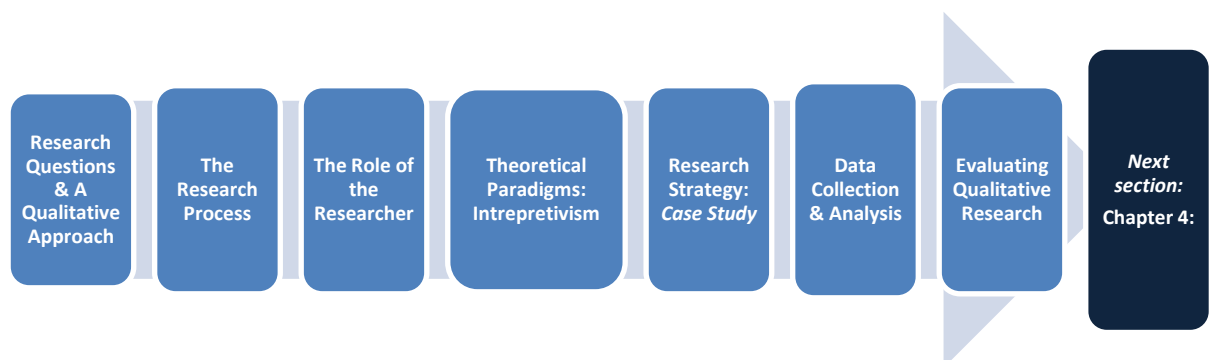


Figure 3.1 Structure of Research Design Chapter

3.2 Research Questions

Lying at the heart of and providing the backbone to any qualitative research design are the research questions. According to Corbin and Strauss (2008, p.19) a research question is the “specific query to be addressed by the research”. In qualitative studies, research questions are often phrased broadly to give the investigator the flexibility and freedom to explore the topic in depth. The purpose of the research questions is to lead the researcher into the data where the issues and problems important to the persons, groups and communities under investigation can be explored (Corbin and Strauss, 2008).

Creswell (2007) believes that in qualitative research there should be a central broad question that focuses on the exploration of the central phenomena or concept in the study, followed by a number (around five to seven) of follow-up questions. These questions can also be open-ended, evolving, and may even restate the purpose of the study in more specific terms. According to Creswell (2007) there are two forms of *sub-questions*, issue and topical. Issue sub-questions address the major concerns and perplexities to be resolved and examined. Whereas, topical sub-questions cover the anticipated needs for information so as to allow for a better description of the case (Stake, 1995).

The central broad question focuses on exploring how high-ability students from socio-economic disadvantaged areas view their experiences of participating in a summer academic programme.

The research also hopes to address a number of sub-questions relating to the specific experience of students while on the programme. In particular these follow-up questions ask:

- How do students benefit from participating in the courses?
- Does taking part in a university programme shape students' opinions towards higher education?
- Are there any negative consequences for students taking part?
- Is there any impact for students when they return to school after participating in a summer programme?
- What aspects of the programme's design assist in shaping students' experiences with the programme?

3.2.1. A Qualitative Approach

It should be stated from the outset, that this study will use a qualitative lens in seeking answers to the research questions. While this statement is unquestionably broad, and encompasses a wide range of issues, it nevertheless embodies a perspective and an outlook that will guide the conduct of this research.

Van Mannen (1979, cited in Merriam, 2009 p.13) provides an overview of a qualitative research stance;

“Qualitative research is “an umbrella term covering an array of interpretive techniques which seek to describe, decode, translate, and otherwise come to terms with the meaning, not the frequency, of certain more or less naturally occurring phenomena in the social world”.

Essentially, Merriam (2009, p.13) continues, “...qualitative researchers are interested in understanding the meaning people have constructed, that is, how people make sense of their world and the experiences they have in the world”.

Creswell (2013, p.39) presents several characteristics of qualitative research which distinguish it from its quantitative counterpart. Such factors include; the researcher as the key instrument in data collection and analysis, a focus on the construction and generation of meaning from the perspective of the participants being studied, an emergent and flexible research design, an inductive process where the researcher is working from the “bottom up”; and a desire to create a holistic account where multiple perspectives are often being identified and explored.

Within the field of gifted education, qualitative studies are conducted less often than those which prioritise quantitative methods (Coleman, Guo & Dabbs, 2007). With that said, an important and relevant study from Hertzog (2003) adopted a qualitative research strategy to explore student experiences within a gifted programme. The use of a qualitative research strategy was chosen for this study as such methods can “...provide a window into the intangible, unintended, or immeasurable outcomes of gifted education services” (Hertzog, 2003, p. 135).

3.3. The Research Process

There is no definitive blueprint *or cookbook* for the design of a qualitative study, yet the presence of a model underpinning the main areas which need to be addressed greatly assists in providing direction, structure, and shape to a study (Patton, 2002; Maxwell, 1996).

Yin (2009, p.26) states that “every type of empirical research design has an implicit, if not explicit, research design”.

Maxwell (1996) thus, supports the use of a model to give explicit structure and design to a study;

“Because a design always exists, it is important to make it explicit, to get it out in the open where its strengths, limitations, and implications can be clearly understood.” (Maxwell, 1996 p.3-4)

According to Creswell (2009, p.3) research designs are “the plans and procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis”. A research’s design impacts the entire research process from the conceptualisation of the problem to the phrasing of the research questions, on to the data collection, interpretation, and report writing Therefore, a coherent and clear model is needed to guide the research process.

Denzin and Lincoln’ (2011) *five phases of the research process* is the design utilised in this study. These five key phases provide signposts to help structure the design of the research. The first phase recognises the *role of the researcher* as overarching and situated within the research. The second phase focuses on *the theoretical paradigms and perspectives* of the researcher, the third deals with the *research strategy*, the fourth with the *methods of collection and analysis* while the fifth phase relates to *the art, practices, and politics of interpretation and presentation*. This model will be used to assist providing structure to this chapter. Phase five shall be interwoven into the other sections, with an additional final section being dedicated to additional issues which need consideration in the research process, such as evaluating qualitative research, accessing participants, ethical issues, and the audience of the research.

3.3.1. Phase 1- The Researcher

The researcher occupies a central role within qualitative inquiry and throughout this study.

Denzin and Lincoln (2000, p.19) acknowledge that for the researcher, a field's research tradition will simultaneously guide and constrain the conduct of inquiry within a study. The research traditions within the gifted education field will be considered in depth during the next phase.

Other researchers adopt a slightly different perspective when discussing the role of the researcher within qualitative inquiry. For instance, Merriam (2009) asserts how the *role of the researcher* is one of the defining characteristics within qualitative research. She states that the researcher is the "key instrument" throughout the research process from the creation of the research questions, through to the collection of data and analysis phases and finally, during the final stage of interpretation and composition of the findings (Merriam, 2009, p.15). There are a number of advantages associated with the researcher occupying such a central role, such as the ability of the researcher to process the information (the data) immediately while being able to clarify and summarise material while also being able to explore any unusual or unanticipated responses during data collection (Merriam, 2009). However, with such a closely connected role to the study, the researcher may also exhibit bias which may impact on the study. Creswell (2009) believes that the researcher must explicitly identify their own biases, values and personal background that may shape the interpretations formed during a study.

As I, the principal researcher was 'an insider' in the organisation which the study is being carried out; I firmly believe and advocate the merits of the Centre's programmes for high-ability students. Furthermore, I recognise the beneficial outcomes and merits of gaining a higher education qualification in today's competitive world where knowledge is key.

While higher education may not be the *right fit* for every single student, and indeed, the programmes at CTYI may not be appropriate for every child, I do think that the courses have much to offer in facilitating students reaching their academic, social and personal potential.

While I did not attend a DEIS school myself, I am intrigued and fascinated that the areas and schools which border the DCU campus have low levels of participation within the university. I believe that there is an unquestionable need for engagement by the university to target these schools in order to directly address this under-representation.

It is important to re-state at this point, that this research study was commissioned by CTYI.

3.3.2. Phase 2: Theoretical Paradigms and Perspectives

The second phase of the research process deals with the worldview of this study.

Denzin and Lincoln (2011) claim that researchers bring certain perspectives, beliefs and assumptions to the research process. When these beliefs are combined, they are said to form *a paradigm*, a term first coined by Thomas Kuhn (1962) to signify a conceptual framework shared by a community of scientists which provide a convenient model for examining problems and findings solutions. A paradigm is typically said to include; a stance about the nature of reality (ontology), the nature of knowledge (epistemology), and methodology (the methods involved in the process). Interestingly, Creswell (2007) adds two more assumptions for qualitative researchers which he believes influences and guides the conduct of inquiry. As well as the researcher holding assumptions regarding epistemology, ontology and methodological choices; Creswell (2007) maintains that qualitative researchers also hold certain beliefs in relation to the role of their own values in the research (axiology), as well a belief as to the style, language and voice of the

research (rhetorical). Each of the above perspectives will be discussed below as shaping forces within the design of the research.

3.3.2.1. Ontology

Ontology relates to the nature of reality. The central question regarding ontology concerns the nature of one's mind, that is, whether social entities can be considered objective entities which are external to social actors or whether they are social constructions built up from the perceptions and actions of social actors (Bryman, 2012; Willis 2007). Within social science, there are two competing ontological stances, objectivism on one hand, and constructivism on the other. Objectivism asserts that social phenomena and their meanings have an existence that is independent of social actors. Whereas, constructivism, which is closely associated with qualitative research maintains that reality is constructed through human activity. For social constructionists, reality cannot be discovered as it does not exist prior to social interaction (Bryman, 2012; Cohen, Manion & Morrison, 2007).

3.3.2.2. Epistemology

Epistemology relates to the nature of knowledge, and what is, or should be considered as accepted knowledge within a discipline (Bryman, 2012).

Similar to the ontological differences that exist within the social sciences, there are also competing views concerning the creation of knowledge. On one extreme lies positivism, which advocates the application of the methods of the natural sciences to the study of the social world. Positivism views knowledge as objective, observable and measurable;

“Positivists believe only phenomena which is observable can be counted as knowledge, that the methods of the natural sciences are appropriate for the social sciences, that hypotheses are derived from scientific theories to be tested

empirically (the scientific method) and that observations are the final arbiter in theoretical disputes” (Bryman, 1988 cited in Richie and Lewis, 2003 p.6)

Traditionally, many of the social sciences have followed such an assumption that reality is ‘out there’, waiting to be discovered and that this knowledge can be identified and communicated to others (Cohen, Manion & Morrison, 2007).

In contrast, interpretivism rejects the use of the scientific model to study the social world, and maintains that there are other ways of knowing about the world than directly observing through the senses. Interpretivists believe that knowledge is subjective, and as researchers, we “do not find knowledge, we construct it” (Merriam, 2009, p.9). The interpretivist worldview is antithetical to positivism. The dominant argument against positivism maintains that the subject matter of the social sciences are completely different to the natural sciences and therefore cannot be studied in the same way;

“...the people and the institutions are fundamentally different to the natural sciences, and as a result, the study of the social world requires a different logic of research procedure, one that reflects the distinctiveness of human as against the natural order” (Bryman, 2012, p.28).

3.3.2.3. Methodology

The methodology of a study concerns itself with the process of the research. The decision about one’s methodological choice is often largely informed by the researcher’s ontological and epistemological beliefs. Creswell (2007) argues there needs to be an alignment, or an informed understanding between the researcher’s own worldview and their chosen methodological strategy as some methodological choices would be incongruent with various theoretical perspectives or paradigms.

The procedures within qualitative research call for an inductive and emerging research strategy which accommodate the revision of a study’s research questions should this be

required. The methodologies often associated with qualitative research give the researcher the flexibility to adapt to the changing landscape during the collection of data, as well as during the analysis phase itself (Creswell, 2007).

3.3.2.4. Axiology

Axiology relates to the values within the research, and in particular, the personal values and feelings of the researcher. While some forms of social inquiry emphasise objectivity and value-free research findings, for qualitative researchers, it is impossible to detach themselves and their values from the study. Thus, the onus for the researcher becomes placed on forewarning “readers of their biases and assumptions and how these may influence the subsequent findings” (Bryman, 2012, p.40). Phase one, the role of the researcher, in the above section of this chapter (see 3.3.1) aims to acknowledge the values of the researcher as a shaping force within this research.

3.3.2.5. Rhetoric

The rhetoric of a study deals with the language of research.

With qualitative strategies of inquiry, the researcher adopts an engaging style of narrative, and may use the first-person pronoun in order to create a personal and literary form of account for the reader (Creswell, 2007). The researcher may also choose to employ specific language associated with forms of qualitative inquiry. Specific language such as the terms: “credibility” and “dependability” replace more positivistic associated terms, such “validity”, and “reliability” (Lincoln & Guba, 1985). Other language associated with qualitative research may also be used; such terms may include “understanding”, “meaning” and “discovery” (Creswell, 2007, p.18).

3.3.2.6. The Worldview of this Study

It is important to establish where the researcher stands in terms of their ontological and epistemological positions as these views directly impact on the methodological choice with a set of naturalistic methodological procedures guiding action within this paradigm (Denzin & Lincoln, 2003).

This research study adopts an interpretivist worldview (which is often combined with social constructivism) (Merriam, 2009; Denzin & Lincoln, 2000). From this ontological perspective, as a social constructivist, this position maintains that reality is socially constructed with no single observable reality. Instead, there can be multiple realities, or interpretations of a single event with the individuals concerned developing their own subjective meanings towards the objects of things (Merriam, 2009). These meanings "...can be varied leading the researcher to look for the complexities of views rather than the narrow meaning into a few categories or ideas" (Creswell, 2007, p.20). The constructivist (or interpretive paradigm as it is also often called) is explained by Creswell (2007) for its relevance in studying everyday phenomenon in the social world;

"In this worldview, individuals seek to understand the world in which they live and work. They develop subjective meaning towards their experiences...these meanings are varied and multiple, leading to the researcher to look for the complexity of views rather than the narrow the meanings into a few categories or ideas. The goal of the research...is to rely as much as possible on the participants' views of the situation."(p.20).

In terms of gaining knowledge, a subjectivist epistemology exists which involves the co-creation of knowledge between the knower and the respondent. According to this perspective, knowledge cannot be *discovered* as it is subjectively acquired. Therefore, knowledge and meaning are acts of interpretation by the researcher. This in turn creates a

clear link between the researcher and the research subject with the researcher's values becoming an inherent aspect of the research process (as outlined in section 3.3.1).

As stated at the outset of this chapter, the study aims to draw heavily on qualitative inquiry. With this in mind, I have revised a table which was first put forward by Creswell (2007). Through this table, Creswell provides an overview of the key philosophical assumptions underpinning qualitative research and links them to implications for practice. Using Creswell's work as a starting point, I added an additional column which links the research practice of this study to the various aspects of the researcher's philosophical assumptions (see section 3.3.2.1.- 3.3.2.5) in order to further justify the research design behind this study (see table 3.1).

Assumption	Questions	Characteristics	Implications for Practice	In Practice- In this study
Ontological	What is the nature of reality?	Subjective, multiple and is seen by participants in the study	Use of quotes and themes in the words of participants and provides evidence of different perspectives	-Different participant groups researched- students, parents and GC's. -Quotes provided for each group
Epistemological	What is the relationship between the researcher and those being researched?	Attempts are made to lessen the distance between researcher and participants	Time spent in the field, and becomes an insider in the field	-'Insider' in the organisation. --Prolonged period in the field (2011-2014)
Axiological	What is the role of values?	Acknowledgement that research is value-laden and that bias are present	Discussion of the values that shape the narrative and interpretations	-Acknowledgement of the 'role of the researcher' in the research process (phase one)
Rhetorical	What is the language of the research?	Literary, informal style using personal voice	Engaging style of narrative used. May use the first-person pronoun & the language of qualitative research	-Use of QL terminology -Inclusion of 'I' throughout the research
Methodological	What is the process of research?	Inductive logic, studies the topic within context, emerging design	Works with details, describes detail in context, and revises questions from experiences within the field	-Qualitative Case Study -Focus on in-depth understanding and exploration of the case

Table 3.1 Philosophical assumptions of qualitative research (Creswell, 2007, p.17) adapted.

3.3.2.7. Giftedness in the Paradigm Debate

This section considers specifically the field of giftedness in relation to theoretical paradigms and the impact which they may have upon research practice.

A positivist, empirical-analytic worldview dominates the conduct of research within the field of gifted education (Dai, Swanson, & Cheng, 2011; Coleman, Guo & Dabbs, 2007; Coleman, Sanders & Cross, 1997; Cross, 1994). Within this worldview, the researcher is a neutral observer who attempts to examine and measure an objective reality which exists “out there” in the world (Creswell, 2003).

As a field, Cross (1994) maintains that much of what we claim to know about giftedness is weighted heavily in favour from studies originating from positivistic (or post-positivistic) research designs. A relevant example in terms of under-represented groups illustrates this. From Terman’s landmark longitudinal study, intelligence testing and IQ became the strongest basis for understanding giftedness (Cross, 2015). The nature of such a discovery became cemented through the use of measurement instruments which were seen as “objective, scientific, fair and sophisticated” (Cross, 2015, p.24). Yet Borland (2004, p.2) argues that the sample used in Terman’s study which provided the basis for knowledge and in turn, his conception of giftedness was “far from representative socio-economically, racially or ethically”;

“If we conceive of giftedness in the manner that Terman did, and if our definitions of the target population in our gifted programs mirror that conception, we need to be aware of the fact that we are operating in a manner that will inevitably advantage certain children and disadvantage others and that the line, or lines, of demarcation between the advantaged and disadvantaged will be in a large part determined by racial, ethnic, and socio-economic differences.” (Borland, 2004, p.16)

Terman's study provides a clear example of how "knowledge" can become translated into practice. Unquestionably, the legacy of Terman's work has had a lasting impact upon our field, with high IQ remaining "the most common synonym for giftedness" (Cross, 2015, p.23).

In determining how to best conduct a research study, Cross (1994) suggests that research should be conducted according to the approach which best addresses the aim of the study and the research questions posed;

"The issue of how research is conducted should reflect what approach will best address the questions of the study, and not be based solely on tradition or fashion. We need to widen our conceptual binders to include other views of the world and voices historically not included in the picture..." (Cross, 1994, p.284)

3.3.2.7.1. The Move towards Interpretivism within the Field of Gifted Education

While positivistic and quantitative studies tend to govern research practice within the field, in more recent years, there has been a growing appreciation as to the valuable role to be played by interpretive, qualitative research. A survey analysing the state of published empirical studies over a twelve-year period (1998- April 2010) found that while quantitative forms of research remained the "dominant mode of investigation", qualitative studies were "making inroads" and encompassed nearly a quarter of the total studies within the field (Dai, Swanson, & Cheng, 2011, p.130). The research conducted by Dai and his colleagues, (2011) largely corroborate the findings by Coleman, Guo and Dabbs (2007) which sought to research and critique the state of qualitative research in gifted education in American journals over a period (1985-2003). According to Coleman et al (2007), studies from the interpretive paradigms exist but to a lesser degree than those from a positivistic or post-positivistic worldview. The authors believe that interpretive research has become a more familiar form of inquiry within the field as it has "currency"

in research publications and that its usefulness rests with its potential to add an ‘insider perspective to the understanding of giftedness’:

“The strengths of interpretive inquiry have not been tapped to explore the insider perspective on talent development. That is, much of our research is from the outsider perspective, which although worthwhile, is limited. The insider perspective, the meanings of people who are gifted and talented as well as those who teach, counsel, and parent the gifted and talented, is urgently needed. In addition, the interaction of curriculum, student, teacher, and program from vary perspectives is an untouched area of inquiry. More research is needed in all these areas.” (Coleman, Guo & Dabbs, 2007, p.61)

3.3.2.7.2. Research within CTYI

Within CTYI to date, there have been three doctoral theses completed. Each one of these studies has considered a different area relating to the development of this specific population. Most interestingly, the worldviews adopted have deviated from the two central paradigms within the social sciences outlined above, positivism and interpretivism. A brief overview of each study and the rationale behind the corresponding worldview shall now be outlined.

The most recent thesis completed by Ledwith (2013) evaluated a dual-enrolment programme, named the *Early University Entrance Programme* (EUE). This programme, which was created by Ledwith, provides transition year students (15-16 years old) with intellectual ability in the 95th percentile the opportunity to study (part-time) university modules within Dublin City University. Another thesis from O’Reilly (2010), investigated the perceived effects of CTYI classes from the perspective of the students and their parents. Both studies (Ledwith, 2013 & O’Reilly, 2010) adopted a pragmatic mixed-methods research design. Pragmatism, which is typically associated with mixed-methods research, primarily focuses on the research problem and the questions asked rather than

the methods (Teddlie & Tashakkori, 2009; Creswell & Plato-Clark, 2007). This paradigm provides the researcher freedom to do “what works” to gain the solutions to research problems (Patton, 1990).

Finally, Healion (2012) embarked on an action-research strategy to study the perceived effects of an after-school enrichment programme amongst primary school (10-12 years old) promising learners from disadvantaged areas.⁷ This study adopted a participatory (or advocacy) paradigm. This worldview can be considered appealing as it allows for a practical and collaborative relationship with participants in order to create an agenda focusing on social change for marginalised groups in society (Healion, 2012; Willis, 2007; Creswell, 2003).

3.3.3. Phase 3: Research Strategy-Case Study

The chosen methodological research strategy for this research is case study. Case study has been defined in a number of different ways, and from a number of theoretical perspectives.

Yin (2009, p.18) defines the case study methodology in terms of a research process;

“A case study is an empirical inquiry that investigates a contemporary phenomenon in depth and within its real-life context, especially when the boundaries between phenomena and context are not clearly evident”.

Stake (1995, p. xi) focuses on trying to pinpoint the unit of study, the case;

“Case study is the study of the particularity and complexity of a single case, coming to understand its activity within important circumstances”.

⁷ This programme, the Centre of Academic Achievement (CAA), set up as a collaborative project between CTYI and the DCU Access Service, will be outlined in detail in the Context Chapter (Chapter Four).

Whereas, Merriam (1988, p. 21) defines case study in terms of its end product;

“A qualitative case study is an intensive, holistic description and analysis of a single instance, phenomena or social unit”.

Each of the above definitions reveals something different about case studies, but Merriam (2009) contends that the most defining characteristic of this form of inquiry lies in delimiting the object of study, that is, the case. Merriam’s definition will be used to guide this study, with the object of study being the Aiming High initiative at CTYI.

3.3.3.1. Case Study Features

The choice to undertake case study research developed out of an understanding of what such a methodology offers.

Merriam (2009) outlines three special features which characterise qualitative case studies. First, case studies are *particularistic* as they focus on a particular situation, event, programme, or phenomena. The case itself is important for the specificity of focus and the intrinsic value which it offers. Case studies are also *descriptive*, as the end product offers a rich and holistic account of the phenomenon under study. Case studies are also, *heuristic*, as they can illuminate the readers' understanding of the topic. Critically, they can bring about discovery and new meaning about the case, and can even lead to a rethinking of the phenomena with the creation of previously unknown relationships and variables.

Yin (2009) suggests that a case study is particularly useful when *how* and *why* questions are asked by the researcher. As this case aims to discover *how* students benefit from taking part in a summer programme at CTYI, a case study allows for the best means to address and respond to this research question. Yin (2009) also notes that such a methodology is particularly useful when your questions require an extensive and in-depth description of some social phenomena which is based in context. As the summer programmes are *anchored in a real-life situation*, and since the contextual nature of the programmes holds great importance, a case study facilitates in provision of a rich, holistic and appropriate account of the phenomena under study (Merriam, 2009).

Case studies are also considered a powerful methodology for exploring new or emerging processes, for looking at the behaviours of individuals or groups and for studying the impact of educational programmes (Yin, 2009; Merriam, 2009; Hartley, 2004).

Finally, in considering how such a methodology fits with the discipline of study, various authors suggest (Merriam, 2009; Stake, 1995) that this methodology is considered useful in applied fields such as education. At a more specific level, case studies are a powerful methodology for researching special populations of gifted individuals and various aspects of educational interventions (Coleman, Guo & Dabbs, 2007; Moon, 1991).

3.3.3.2. Case Study Design

Case studies can be approached in different ways, so establishing the intent, and the design of the case study is important from the initial stages.

Different authors present different types of case study designs. Yin (1984), Merriam (1998), and Stake (1994) all name three different types of case study. Yin (1984) identifies: exploratory, descriptive and explanatory. Merriam (1998) lists; descriptive, interpretive, and evaluative, while Stake (1995) specifies; intrinsic, instrumental and collective.

Beginning with Yin, he describes how exploratory case studies can be quite general in their focus, and can often precede future research. Descriptive case studies are useful for outlining a sequence of events, while explanatory case studies can be used to seek out causal relationships (Yin, 2009, Ledwith, 2013).

Stake (1995) outlines three different types; the intrinsic case study is when there is a need or an obligation to study a particular topic or case. It is not studied in order to learn about a greater problem "...but to learn about the specific case itself because the case presents an unusual or unique situation" (Creswell, 1997, p.74). An instrumental case study aims to create a greater understanding of an issue or concern in which one bounded case is used to illustrate the issue. On the other hand, a collective case study focuses on one issue or concern and these are explored through a number of cases (Creswell, 1997; Stake, 1995).

There are three different types of case study according to Merriam (1998). Descriptive case studies are frequently used in educational research on pioneering programmes and practices to present a detailed description of the topic under study. Interpretive case studies, or analytical case studies, also are rich in description but aim to challenge theoretical assumptions and generate new theory about a phenomenon. Finally, evaluative case studies, involve description, explanation and judgement.

This study will adopt a descriptive case study design (Merriam, 1998). This design was considered most appropriate as it permits a detailed description of the Aiming High case to be put forward to the reader. Such a design also holds the most suitability when researching “innovative programs and practices” within education and for topics which have had little previously research carried out on them (Merriam, 1998, p.38).

3.3.3.2.1. Single or Multiple Case Study

Another critical distinction in the design of a case study is deciding between whether to conduct a single or multiple-case study.

A single case study focuses on the whole (i.e. the programme) or the object of study (i.e. the unit of analysis). Multiple case studies, as the name suggests, involves the collection and analysis of data from a number of cases and sites, which are categorically bound together. The advantage of having multiple cases allows the researcher freedom to explore similarities and differences among cases, or to examine, predict and replicate findings so as to add generalisability to the findings (Merriam, 2009; Yin, 2009).

Although, such a multi-case design can be considered to add to more of a compelling interpretation of the case, and can strengthen the precision, and validity of the findings, such a design is not possible considering that no similar programme or case exists. Consequently, such a design is considered inappropriate in addressing this research problem.

Yin (2009, p.40) outlines how a single, holistic case study may be justified in a number of circumstances, including when the case represents an “extreme or unique case”. While this object of study or the case is not extreme, it is unique, in that no similar programme with similar entry and qualifying criteria exists for this cohort of low income, high-ability students.

3.3.4. Phase 4: Methods of Collecting and Analysing Empirical Materials

This phase intends to discuss the data collection and analysis stages of the research study.

3.3.4.1. Data Collection

Before any data can be collected or analysed, a plan must be drawn up of who to research; which in turn, gives rise to the idea of a sample, and from there, an account of the research participants themselves, which leads onto the timeframe of the data collection.

3.3.4.1.1. The Sample

Sampling is the process of selecting a number of individuals (the sample) from a population, in such a way that the individuals are representative of the larger group from which they were selected (Fraenkel & Wallen, 1996). While there are various types of sampling strategies that can be implemented in research, within qualitative inquiry, the strategy which is most appropriate is the theoretical sample or purposive sample.

Case study research is not sampling research (Stake, 1995), and as a result, the sampling strategy becomes based on a premise that the investigator must select a sample from which the most can be learnt. Essentially, participants are chosen as they serve *an investigative purpose* (Merriam, 2009). This study adopts a purposive sampling strategy, in that, all the participants were selected as each had experience and a perspective of the case, (i.e. Aiming High) and as a result, each would be able to provide varying and different levels of insight into the research questions.

3.3.4.1.2. Research Participants

There were four main groups of participants in the research; *current students, previous students, parents and guidance counsellors*. After the initial data collection and analysis phase, an important distinction became evident within the *current student* cohort, between new students who were participating in the courses at CTYI for the first time, and those repeat students who at the time of data collection had been a student of CTYI previously. At the time of data collection, this difference with regard to their experience came to influence the questions asked and the depth of response that a participant was able to give. With that said, the views from both groups of current students were beneficial as they allowed for different perspectives and insights to be gained from both groups.

Within this study, a selection of students, parents and school guidance counsellors were studied as part of the data collection effort.

Each of these four groups of participants will now be considered further.

Current Students

The predominant group of research participants are the *current students* of CTYI. These students are secondary school students from the DCU Access-linked schools who range in age from 13-17 years old. Questionnaires, interviews and focus groups were used amongst this group of participants. The data amongst this cohort was collected towards the final days of summer programme when students would be able to reflect best on their CTYI experiences. All of the data collection amongst this cohort took place on the DCU campus.

Previous Students

The second group, are *previous students* of the CTYI summer programmes. These students would have attended one of the DCU Access-linked DEIS secondary schools, but have since left school, and would now be eighteen years or older. Postal questionnaires were used to research this group of students. Although, the research aimed to focus on the 'current student' experience, this group became an important and interesting cohort as they could add perspective to their experiences and aided in the establishing a slight longitudinal focus to the research.

Parents

The third group, are the *parents* of students who would have had their children participate in the summer programmes. Focus groups were used to research this cohort.

Guidance Counsellors

The final group are *guidance counsellors* from the corresponding Access schools. Interviews and questionnaires were used amongst this group. Guidance counsellors were included in the study as they play a vital role in identifying, nominating, supporting and in certain cases, organising the provision of financial assistance amongst students taking part in the programmes.

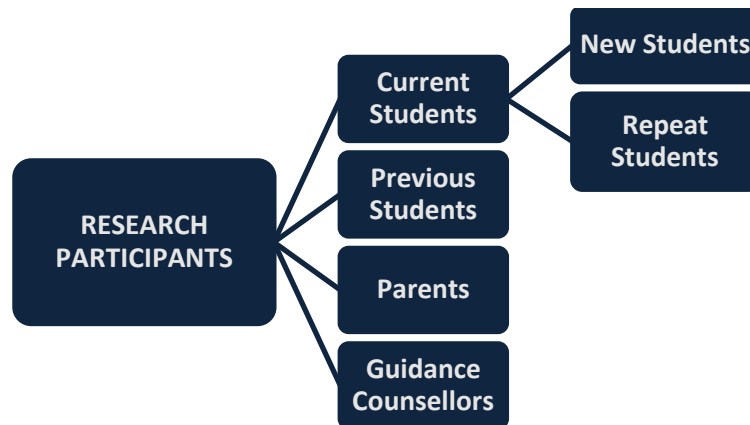


Figure 3.2 Overview of the study's participant groups

3.3.4.1.3. Research Timetable

The data collection period occurred at various intervals over a two and a half year period (April 2012 to October 2014) with each grouping of data being analysed after collection to allow for the direction of further research to develop. As case studies do not claim any particular methods for data collection (Merriam, 2009) the data collection methods were chosen based on their ability to answer the research questions effectively.

Amongst the different cohorts, data was collected at assorted intervals over the duration of the study (see Table 3.2 for the Research Timetable). Data collection commenced with postal questionnaires being sent out to current students (Summer 2011 students in May 2012) in order to acquire an initial grasp of the research topic while also allowing for additional avenues of possible exploration to emerge. This initial phase led to further questionnaires, and student interviews throughout the summer of 2012. Subsequent data collection continued and became based on preliminary analysis and the refinement of themes throughout 2013 and finally, in 2014. The research timetable (Table 3.2) was developed in order to allow for the simultaneous analysis of data along with collection.

By engaging with the data in such a way, it allowed for additional concepts to be investigated and new relationships to be explored. This technique of *'progressive focusing'* allowed the researcher to gradually refine and reflect and ultimately focus on *'what really matters'* (Stake, 1995).

Year	Current Students	Parents	Guidance Counsellors	Previous Students
2011 (in May 2012)	Questionnaires			
Summer 2012	Questionnaires & Interviews		Questionnaires	
Summer 2013 (May-August)	Questionnaires & Interviews	Focus Groups	Interviews	Questionnaires (Autumn 2013)
Summer 2014 (May-August)	Questionnaires & Interviews	Focus Groups	Interviews	Questionnaires (Autumn 2014)

Table 3.2 Research timetable, including the study's participants, and data collection

It is clear from the above timetable that there was a great amount of data collected over the years which data collection took place. In terms of the development of these instruments, the previous phase would usually determine the shaping of the questionnaires, interview or the focus group guides. For instance, the questionnaire and interview guides from summer 2013 would be largely developed from interesting insights generated from the responses which emerged in summer 2012, with the data collection methods in 2014 reflecting areas which needed further exploration stemming from data collection in 2013. Likewise, if there was an interesting finding within one interview, subsequent interviews with different participants may explore such an area. This emphasis on an emerging research design is a central feature qualitative research (Merriam, 2009) and one which greatly assisted in the development of this study.

In terms of the timing of the data collection, all data with students was collected towards the end of the programme when students would be able to reflect best on their experiences. No data was collected with students prior to taking part in the courses. With the guidance counsellors, the interviews took place during the school academic year at a time of their choosing. All of the guidance counsellors had experience nominating and sending students on to the programme. In terms of the parents data collection phase, this data was collected at times when parents would be on campus. For example, focus groups were held when students were attending the programme orientation. The potential parent participants were carefully chosen by the researcher after examining student records and assessing if their child had previously attended the summer programme and thus, would be able to provide insight into the experiences of the programme.

Table 3.3 provides an overview of the different phases of data collection in terms of the research methods and the various participant groups. It is evident from the table that there is an emerging research design which gives the researcher the flexibility to explore topics and areas of interest as they emerge.

2011	2012	2013	2014
QU (CS)	QU (CS)	QU (CS)	QU (CS)
Exploratory. General Q's in relation to the programme & student's feeling towards their experiences on the programme	Using the previous responses to inform what questions are asked. Probing responses when necessary		
Current Students	IW (CS)	IW (CS)	IW & FG (CS)
	Using the responses from QU (CS) 2011 to assist in the design of the Interview Guide	Using the previous year's responses to inform what questions are asked. Probing responses when necessary	
GC's	QU (GC)	QU & IW (GC)	
	Exploratory. General Q's in relation to identification & benefits for students taking part	Using the previous year's responses to inform what questions are asked. Probing responses when necessary	
Parents	Exploratory. Finding out about the programme? What they thought? Concerns? Opinions? How did they feel?	Using the previous year's responses to inform what questions are asked. Probing responses when necessary	
Previous Students	Exploratory. Design remained the same in 2013 & 2014 as it provided rich data in 2013		
CODES:			
<i>QU= Questionnaire. FG= Focus Group. IW= Interview.</i>			
<i>CS= Current Students. PS= Previous Students. PR= Parents. GC= Guidance Counsellors</i>			

Table 3.3 From data collection to analysis

3.3.4.1.4. Data Collection Methods

Questionnaires, interviews and focus groups comprised the research methods used in this study. The following section outlines these methods and their relevance in addressing the research questions.

Interviews

Interviews or “conversations with a purpose” were the main data collection tool used in this research (Dexter, 1970 cited in Merriam 2009, p.36).

The structure of an interview exists along a “continuum ranging from informal or conversational interaction to questionnaire driven highly structured interviews” (Merriam, 2009, p.90). The semi-structured interview lies in the middle of this continuum and is the type of interview used throughout the data collection phase of this research.

Interviews are a useful method for collecting data as they allow the researcher to gain an in-depth understanding of the phenomena from the perspective of the participant (Merriam, 2009; Patton, 1990).

“We cannot observe how people have organised the world and the meanings they attach to what goes on in the world. We have to ask people about those things. The purpose of interviewing, then, is to allow us to enter into the other person’s perspective.” (Patton, 2002, p. 340)

Merriam (2009) puts forward that interviews can be a useful realm for participants to share information about often unobservable phenomena (e.g. thoughts, feelings and intentions). By interviewing an individual, they can give direct quotations about their experiences, opinions, feelings and knowledge.

Wisker (2001, p.165) also considers interviews as beneficial in certain instances;

“(Interviews are)...an effective data collection tool in the gathering of such information which is based on: emotions, feelings and experiences, information based on sensitive issues and information based on insider experience, privileged insights and experiences.”

Patton (1990) also suggests that interviews can be an important approach if one wishes to find out about a person’s goals, intentions, desires and values.

Prior to the commencement of each of the interview phases, an interview guide (or protocol) was created which contained topics and questions to be explored throughout the interview. This guide contained several different components such as an introductory section regarding the nature of the research, followed by a series of ice-breaker questions leading on to the main body of questions, and finally a closing section at the end of the interview.

In terms of the questions asked, the introductory questions were often very general questions which were unrelated to the research topic itself but which were important to ask in order for the participant to feel comfortable and at ease when speaking within an interview context. For example, in the student interviews, a number of ice-breaker opening questions were asked such as the name of their school, where they lived, or how long it took for them to commute over to the university each morning. The main body of questions related to the purpose of the study and *what I wanted to find out*. These questions are directly outlined in the interview guides contained in Appendix D. An example of the questions would be: ‘Where did you first hear about CTYI?’; ‘What do you think are the benefits to taking part?’; ‘Do you see any negatives to participating?’ The closing section of the interview usually ended with a general question enquiring if the participant had any further comments which they had not spoken about previously as to

their experiences within CTYI. In some cases, the participants would outline something new or make reference to some interesting aspect of the programme, and at other times; they would state they had nothing further to add. The interview or focus group would then be concluded.

Each interview guide was designed in a way to give a degree of structure to the interview, but at the same time, was kept relatively flexible so that the participants were able to fully express their views, while also giving the participant and the researcher the freedom to drive the conversation outside the list of questions (Cohen, Manion & Morrison, 2007). A flexible format is also useful as it allows the researcher to gain further clarification of the participant's answers, to respond to the situation at hand, while engaging with the emerging worldview of the respondent, and to the new ideas on the topic (Merriam, 2009).

In total, 22 interviews were conducted with students and the guidance counsellors over the course of the study.

Focus Groups

Focus groups were also used during the data collection amongst current students and parents.

Focus groups are a type of group-interview for use amongst a group of people who have knowledge regarding a particular topic (Merriam, 2009). Focus groups bring together a specifically chosen sector of the population to discuss a particular given theme or topic, where the interaction of the group leads to data and outcomes (Cohen Manion & Morrison, 2007). The questioning in focus groups is usually on a particularly well defined topic and the emphasis is on the interaction within the group and the joint construction of meaning (Bryman, 2012).

Focus groups have a number of uses. Firstly, this technique allows the researcher to develop an understanding about why people feel the way they do. Within the group, people can probe other people's point of view, and as an individual listens to other group members, they may modify or qualify their view, or additionally they may want to voice something that many have not thought about before. Secondly, participants can bring to the fore important and significant issues in relation to a topic under discussion. Thirdly, focus groups allow the inquirer to access a process that qualitative researchers are typically interested in: interaction. Like in-depth interviewing, focus groups allow access to content that researchers are often interested in, that is, the attitudes and experiences of our informants (Bryman, 2012).

With regards to the size of the groups, there is no agreed number as to the most appropriate number of participants. Bryman (2012) suggests that it involves more than one, usually at least four participants, while Richie and Lewis (2003) propose somewhere between four and ten participants. In this case study, the participant numbers and gender varied within each group. The focus groups were organised and were conducted strategically at a time when parents were on campus, as a result, encouraging participation did not prove too problematic.

In total, there were five focus groups carried out; four with parents, and one with students. Appendix C provides a detailed breakdown of the individual composition of each of the four parent focus groups (*roman numerals section*). With regard to the number of parents within each group, there was between two and six parents within each of these four groups.

Questionnaires

Questionnaires were used as a form of data collection as they can give a succinct synopsis of the overarching trends or attitudes of the people filling out this questionnaire (Creswell 2009). The attributes related to the sample of the public who fill out the questionnaire may also typify the attributes of a larger population (Babbie, 1990). In addition, and specifically in this case, questionnaires can be used to explore findings from other research methods (e.g. a face to face interview) with a larger number of participants.

Cohen, Manion and Morrison (2007, p.258) maintain that the appearance of the questionnaire is “vitally important”, and as a result, significant effort was dedicated to laying out the questionnaire in a way which looked “easy, attractive and interesting” for the participants. Thus, the ordering of the questions is an important consideration. Cohen, Manion and Morrison (2007) recommend that the initial questions should be simple and have high interest value; the middle set of questions should contain the difficult questions, with the final section also containing questions with a high interest value in order to encourage the respondents to return the completed questionnaire (Cohen, Manion and Morrison, 2007). Each questionnaire also provided extra space in order to allow for the respondent to elaborate on any of their answers if needed.

Over the course of the research, the structure and the focus of the questions changed and adapted to the development of the study. In relation to the structure of the questions; dichotomous questions, a multiple response format, and likert scales were all used throughout the questioning of respondents. The majority and perhaps most interesting in terms of findings were the open-ended questions requiring the participants’ opinions. Such an emphasis on open-ended questions is appropriate when the research adopts a qualitative lens as “an open ended question can catch the authenticity, richness, depth of

response, honesty and candour which are the hallmarks of qualitative data” (Cohen, Manion & Morrison, 2007 p. 255).

Questionnaires were distributed amongst students- both with current and previous students at different points of the research process. The layout and the type of questions often varied as the research progressed and evolved. The majority of questionnaires were completed when students were on campus during the summer programmes. For data collection outside this, postal questionnaires were sent to students homes. Stamped addressed return envelopes were provided to students to accommodate the completed responses and follow-up phone calls were made to the student homes enquiring if they had received the questionnaire and if they planned to participate in the research.

In total, over the course of the research, 120 questionnaires were completed amongst students (current and previous) and guidance counsellors.

Figure 3.3. contains an overview of the study’s research participants and data collection methods used with each. Appendix D provides copies of the various data collection tools used with all the various participant groups.

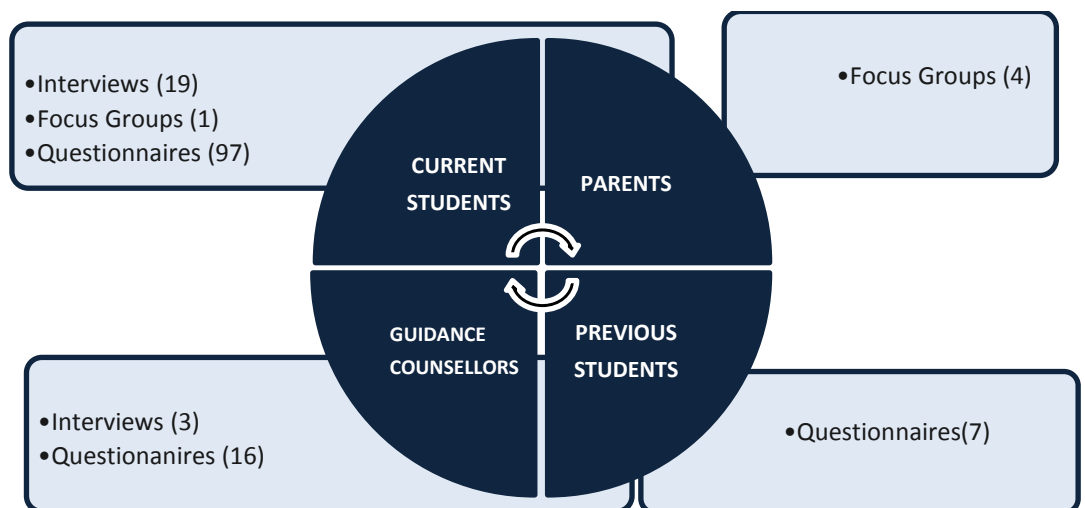


Figure 3.3 Overview of the study's research participants' and data collection methods

Of course, the collection of such large amounts of data gives rise to questions regarding the analysis of the participant's views. The next section covers data analysis.

3.3.4.2. Data Analysis

The collection of data gives way to analysis.

To put it simply, data analysis is the process of making sense out of the data. At a deeper level, analysis involves organising data into patterns, categories and basic descriptive units. The main purpose of analysis relates to attaching meaning and significance to these patterns and categories whilst looking for relationships and linkages amongst the various descriptive dimensions (Patton, 1990). It is a complex and challenging activity comprised of moving back and forth between concrete bits of data and abstract concepts, between inductive and deductive reasoning, and between description and interpretation (Merriam, 2009).

There are no universal rules for analysing and interpreting data, as Patton (2002, p. 432) coherently asserts; "...no formula exists for that transformation; guidance, yes; but no recipe". Even without *a recipe*, or a procedure to follow, various authors provide guidance into strategies and procedures which can assist in the analysis of qualitative data (Merriam, 2009; Yin, 2009; Stake, 1995).

The below sections outline the *meaning-making process* undertaken as part of this study.

3.3.4.2.1. Analysing the Case

The analysis process of qualitative studies is often regarded as one of the most difficult aspects of undertaking a case study methodology due to the overwhelming volume of data that is present with such a form of research (Merriam, 2009; Yin 2009).

Patton (1990, p.372) also recognises how challenging the analysis process is as there is “no formula for determining significance” and “no way to perfectly replicate the researcher’s analytical thought processes”. The onus is therefore on the researcher to fairly represent the data and to communicate what the data reveals given the purpose of the study. In a descriptive case study, the goal of the analysis process is to culminate the assertions and descriptions of the categories and to present them in a way which allows for the holistic description of the bounded system or the case. Yin (2009, p.109) thus suggests that adopting a “general analytic strategy” for “defining priorities of what to analyse and why” is advantageous.

The analytic strategy which this study draws on is presented by Merriam (2009), and is highly inductive and comparative, and one which utilises the *constant comparative method* first proposed by Glaser and Strauss (1967). Merriam, views data analysis as a process which is highly inductive and comparative beginning with ‘*category construction*’ (or open coding). This process involves identifying segments or assigning some designation to the various aspects of the data; these designations can be single words, letters, numbers, phrases, colours or a combination of these (Merriam, 2009). Corbin and Strauss (2008, p.66) compare coding to “mining”, in which the researcher must *mine the data*, digging beneath the surface to discover the hidden treasures contained within the data. Category construction or open coding gives way to *axial coding* or *analytical coding*, in which the initial codes become more refined and additional codes are created which come from an interpretation and reflection on meaning.

It is through the process of coding that the data becomes organised and managed, with the initial categories becoming constructed, and subsequently forming subcategories to segment the data. In relation to the specific nature of the coding, some of the more detailed codes can develop more or less directly from the informant’s words, with others

being '*summary glosses*' of what the informant seems to be referring to or describing at a particular point in the text (Coffey & Atkinson, 1996). The regularities and patterns which emerge from the data become the categories or themes which "capture some recurring patterns that cuts across the data", and are where subsequent items are organised into. In effect, the researcher becomes able to identify meaningful data, thereby *setting the stage* for interpretation (Merriam, 2009; Miles and Huberman, 1994).

While Glaser and Strauss' (1967) constant comparative approach to data analysis and coding is associated with the grounded theory approach, Merriam (2009) proposes that the inductive technique can and has been applied throughout qualitative research without building a grounded theory. For instance, a study from Enerson (1993) investigated the impact of a summer residential programme on gifted students. Enerson applied the constant comparative method to analyse the data, with the process resulting in a descriptive account of student experiences from the programme.

In relation to the analysis phase of this study, the qualitative data was analysed using the constant comparative method which was outlined earlier in this section. Each interview and focus group was transcribed upon its completion and read line-by-line in order to create the initial categories or open-codes. A second round of coding was subsequently undertaken in order to create relationships and connections within the data. The final round of coding, analytical coding, involved reflecting on the categories which were created from the previous two phases in order to construct the themes which cut across the whole set of data. The process of data analysis was highly inductive and comparative and involved moving back and forth with the different sets of data (i.e. focus group transcripts, interview transcripts etc.). The creation and presence of a handwritten 'researcher's diary' greatly assisted in the analysis phase of the study as it became where insights and potential avenues for exploration were stored and developed.

Detailed notes were also taken on any interview or focus group if they produced any interesting outcomes which warranted questioning to subsequent participants. These notes would then be incorporated into any subsequent data collection for exploration. It is also important to state at this point that even though the data collection took place over a number of years, the structure of the research timetable assisted in the analysis phase of the data as each set could be fully explored and reviewed before a subsequent phase of data collection took place.

In terms of the quantitative data contained in the questionnaires, basic descriptive statistics (e.g. percentages, counts, means etc.) were generated as part of the analysis process. The main purpose of the questionnaires was to establish descriptive information about the population but also and critically to inform the development of the other data collection tools (i.e. interviews and focus groups). Significantly, many of the questionnaires contained open-ended questions which provided valuable data, and these responses were analysed along with the rest of the qualitative responses.

Appendix E provides a detailed breakdown of the central themes from the analysis phases arising from each the different stages of data collection.

Computer Assisted Qualitative Data Analysis Software (CAQDAS)

The analysis phase of this research was assisted by a computer software programme, NVivo, 10.0. Leech and Onwuegbuzie (2011) remark that NVivo is a commonly used analysis programme for educational researchers.

The use of such software can be considered valuable within qualitative research as it can greatly assist and facilitate the analysis of data. According to Merriam (2009), certain features of these programmes make them appealing to researchers. Firstly, such software tools offer an organised filing system for data, allowing the researcher to manage and retrieve the data easily when required. Secondly, such programmes encourage “a close examination of the data” (p.196) giving the researcher the opportunity to consider the data line by line and to think about each idea. Creswell (2007, p.164) notes that without such a programme, the researcher is more likely to “casually read through the text files or transcripts and not analyse each idea carefully”. Thirdly, the software aids in providing a clear visualisation of themes and categories and allows the researcher to observe from a distance the various themes and coding patterns that have evolved throughout the analysis process.

The opponents of such software may argue that computers in the analysis phase are “enemies of creativity” which obstruct the creative process of data analysis (Richards, 2005, p.106). Instead, they believe that meaning-making from the data can be done through working with paper records, and the manual filing of index cards to produce hierarchical categories and subcategories. Merriam (2009) also cites criticisms of such software tools as costly to purchase, time consuming to learn, and a mechanism which may create unnecessary distance between the data and the researcher. The discussions around the application of computer software analysis packages in the research process always highlights the point, that the researcher is the main tool for data analysis and while

such software may assist the researcher in the analysis phases of the research, it does not carry out or cannot interpret the data itself (Bazeley & Jackson, 2013; Leech & Onwuegbuzie, 2011; Richards, 2005).

Despite the limitations outlined above, NVivo was utilised within this study. While all the interviews and focus groups were transcribed using a word processor, the transcripts were coded and explored within NVivo. Notes and memos were also made within the NVivo as well as on the hard copy transcripts. Within NVivo, the data was coded according to a number of themes as they emerged from the data. Upon completion of the initial coding phase, subsequent categories were created and refined as required.

3.3.4.2.2. Analytic Tools

Analytic tools are the “mental strategies that researchers use when coding”, they aim to stimulate the analysis phase and to allow the researcher to fully get to grips with the “mountains of data” which is often a feature of qualitative inquiry (Corbin & Strauss, 2008, p.67). While there is no mandatory technique for the analysis process, Corbin and Strauss (2008, p.67) believe that such tools are considered useful as “they can help the researcher to avoid standard ways of thinking about phenomena, force the asking of questions that can break through conventional thinking, and help in the identification of the various dimensions of categories, while also stimulating the inductive process”. A number of Corbin and Strauss’s tools (2008) were used in the analysis phase and these are outlined below.

Questioning the Data

Corbin and Strauss (2008, p.69) believe that '*questioning the data*' is fundamental to analysis as it enables the researcher to "probe, develop provisional answers, think outside the box, and to become acquainted with the data". It is suggested that asking questions from the data should be undertaken at every stage of analysis from the beginning to the final writing (Corbin & Strauss, 2008). Even though the nature of the questions asked will change over time and become based on the evolving analysis of the research, the continuing questioning of the data is important so that deeper analysis can occur to avoid shallow and uninteresting findings;

"Asking questions and thinking about the range of possible answers helps us take the role of the other so that we can better understand the problem from the participant's perspective. Any answers to these questions are only provisional, but they start us thinking about what ideas we need to be looking for in the data, both from this participant as well as future ones." (Corbin & Strauss, 2008 p.70)

Corbin and Strauss (2008, p.72) categorise the various types of questions that can be asked of data. Firstly, there are '*sensitizing questions*' which can tune the researcher in to what the data might be indicating. Secondly, there are '*theoretical questions*' that help the researcher see process, variation and to make connections between the concepts. Thirdly, there are '*practical questions*' which provide direction for the theoretical sampling and which help with the development and structure of theory. Fourth, there are '*guiding questions*'; these are the questions that guide our interviews, observations, data gathering and the analyses of these.

The questioning process initially commences with the identification of key themes and patterns within the data. This in turn, develops into a more thorough activity through coding the data, which culminates in the creation of refined categories (Corbin & Strauss, 2008).

Making Comparisons

Two types of comparison making are outlined by Corbin and Strauss (2008). The first, *comparative comparison* involves comparing incident with incident to understand similarities and differences, so that similar incidents can be grouped together as a *high-level descriptive concept*. Fundamentally, this allows the researcher to identify properties and dimensions specific to a property of theme for further exploration. At a more complex level of analysis lies *theoretical comparison* in which incidents are coded in terms of their properties and dimensions. As sometimes, events may be difficult to analyse at face value by reconceptualising them in terms of their properties, one is able to develop meaning and significance to allow for a more comprehensive and deeper analysis to occur.

Looking At Emotions and Words That Indicate Time

When situations or events are significant enough in the lives of individuals, they are likely to express a range of emotions in both the participant and the researcher. Corbin and Strauss (2008, p.83) highlight the importance of such emotions and feelings because, “...they are often part of context... and/or are associated with action or inaction”.

Another tool is looking at the use of ‘*time*’ related words as these often denote “a change or a shift in perceptions, thoughts, events or interpretations of events”. By looking at such words (i.e. when, after, since, before, in case), these permit the researcher to frame events, indicate conditions, and help identify process and context (Corbin & Strauss, 2008, p.83).

As the data collection took place at various different times, the various different participant groups often had perspective on their experiences, so would regularly use words which indicated change.

For instance, when one of the previous students was questioned about how her experience at CTYI impacted her when she returned to school, she reported a shift in her mentality about the work;

“After I returned to school, everything seemed so easy and boring.” (Previous Student, 136(N), CAT)

Metaphors

A metaphor is a tool which can reveal or illuminate special properties of an object or event. In conversation, participants may use metaphors to describe events or convey emotions; as a result, such narrative may act as a powerful asset when interpreting situations and explanations. Patton (1980) also believes that metaphors can have the ability to carry implicit connotations and thereby enable a vivid picture of a scenario to be created by the reader. One of the most vivid metaphors was given by one of the parents who discussed her reluctance when she first heard about CTYI and the courses it provides. When questioned about her initial thoughts of CTYI she responded; “I didn’t want to be waving a carrot in front of a donkey”. For this parent, the concern stemmed from an awareness of how beneficial and worthwhile her son would find the courses but how the regular course fees would be impossible for her to meet.

On another occasion, one of the guidance counsellors used a metaphor when speaking about the role of the programme in “breaking down barriers” for the participating students by giving the students the chance to experience studying in a higher education environment from an early age.

3.3.4.2.3. My Case Study Database

Qualitative research often generates “voluminous and often overwhelming” amounts of data which must be analysed (Patton, 1980, p. 297). Thus, Yin (2009) recommends the creation of a ‘case study database’, in which interview transcripts, field notes, records and the investigators own documents should be organised so that the data is easily accessible for analysis.

As stated previously, qualitative data was collected through interviews, focus groups, and to a smaller extent, the open ended questions on the questionnaires. Upon completion, the interviews and focus groups were audio-recorded, and then transcribed verbatim. The open-ended answers on the questionnaires were also transcribed. Merriam (2009, p.171) suggests that the transcription of data can be a form of “rudimentary analysis” as initial insights and hunches are generated as one works through the data. Each transcript was read in its entirety before brief notes were made in the margins in order to identify important statements and to highlight interesting quotations. Possible avenues for further exploration and probing were also noted for future phases of data collection. All of the interview and focus group transcripts as well as the open-ended statement pieces from the questionnaires were organised and indexed according to when the data collection took place and according to which participant group (e.g. Current Students- Summer 2012, Parents- Summer 2014). Upon the collection of each set of data, preliminary data analysis would commence to determine the further direction of the study (Merriam, 2009).

Data Sorting and Organisation

In order to keep on track and up-to-date with the amount of data that was being collected over the course of the analysis phase, two important documents were created and included within the case study database. The first was a checklist for each of the interviews and the focus groups conducted, as shown below. This simple checklist provided a series of steps and a record to follow for each piece of the data collection.

Date of Data Collection	Data Collection Method	Type of Research Participant	Transcribed	Notetaking	NVivo Coding	Other Notes
DD/MM/YEAR	e.g. interview	e.g. student	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	

Figure 3.4 Data collection and analysis process checklist

Second, a detailed inventory using Microsoft Excel was created and updated regularly to record all the research participants involved in the study. This information contained information including their name, their school name, subject and programme at CTYI, data collection tool used etc. The presence of such a database allowed for the data to be easily managed and accommodated in-depth analysis to occur. This information is contained in Appendix A.

A handwritten researcher’s diary was also kept as part of the analysis phase of the research which the evolving themes and concepts were identified, stored, developed and refined. These notes became important in keeping track of the “analytical insights” throughout during the data collection phases (Patton, 1990, p.378). All of the transcripts and data files were kept in secured offices and on a password protected computer on the university campus.

Constructing the Case Study

In terms of the process for turning the data into a case study narrative, Patton (1980) provides some commentary on the process of constructing case studies which can be used to give structure to the portrayal of the case. This framework is identified below.

The Process of Constructing Case Studies (Patton, 1990, p.388).	
Step 1:	<i>Assemble the raw case data</i> This data consists of all the information collected about the person or programme for which a case study is to be written.
Step 2: <i>(Optional)</i>	<i>Construct a case record</i> This is a condensation of the raw case organising, classifying, and editing the raw case data into a manageable and accessible package.
Step 3:	<i>Write a case study narrative</i> The case is a readable, descriptive picture of a person or programme making it accessible to the reader all the information necessary to understand that person or programme. The case study is either presented chronologically or thematically (sometimes both). The case study presents a holistic portrayal of a person or programme.

Table 3.4 The process of constructing case studies (taken from Patton, 1990, p.388)

In terms of this study, the assembly of the raw case data (step one) and the construction of a case record (step two) were undertaken using a combination of different methods (e.g. spreadsheets, Word files, NVivo, researcher's diary). When combined, the various different files formed the 'case study database'. Step Three, the writing of a case study narrative, is spread over two of the following chapters (Chapters Four and Five) in order to allow for the holistic and descriptive portrayal of the programme.

3.3.4. Additional Issues in the Research Process

There were a number of additional factors relating to the study's design which also needed consideration during the research process. Issues relating to the accessing of participants, the audience of the study, and the ethical implications of the research, were all taken into account at various intervals during the process.

3.3.4.1. Access to Participants

Accessing participants in social research can often be a challenging task. In this study, to a large extent, this was not the case. Crucially, the project has the support of the Director of CTYI, while I, the principal researcher, was a staff member within the organisation.

In relation to the collection of data itself, all the data (apart from the guidance counsellors' interviews, which were done in the corresponding schools) was collected on the DCU campus. In order to maximise the participation rate, the collection of data was organised at a time when students and parents would be on campus (e.g. student orientation before the summer programme).

3.3.4.2. Ethical Considerations

The research of human participants and particularly, those under 18 years old raises a number of ethical issues. Cohen, Manion and Morrison (2007, p.56) emphasise that as social scientists, ethical issues are an important consideration to tackle from the start of the research process when researching human participants;

“As social researchers, there is an obligation to take account of any effects of the research on participants, and to act in such a way as to preserve their dignity as human beings.”

During the initial phases of the project, ethical approval for the project was sought from the university's ethics committee. This process involved providing a comprehensive outline of the research topic itself and the research strategy to be adopted.

A timeline of the study and the data collection instruments were also included. In addition, copies of the plain language statements and the informed consent forms were also submitted (Appendix C). After the clarification of a number of the elements within the application, ethical approval was secured by the committee (also included in Appendix C).

In qualitative studies, Merriam (2009) believes that it is in the data collection and dissemination of findings stages where ethical issues are most likely to arise. Yet, with this said, an awareness was maintained at each point of contact with the participants as to the possible impact which the research may have. Consultation was regularly sought with the project's supervisors prior to any data collection.

From the outset, it was made clear to the participants that taking part was voluntary, that their answers would be kept confidentially, and that they were free to withdraw at any time from the study. No problems arose during the course of the research with students, their parents or the guidance counsellors.

Throughout the research process, the relationship between the researcher and participants can be a challenging and complex one. This relationship may become more arduous when in discussion about sensitive topics. Lee (1993) put forward that there can be different characteristics relating to 'sensitive research': one which may involve the discussion on taboo topics; or ones which may be sensitive for situational, or social reasons. This research topic can be considered sensitive as the students involved come from areas of socio-economic disadvantage and these students are at a disadvantage compared with more advantaged counterparts. It is unlikely that the students who participate in the summer programmes at CTYI would be able to do so if it was not for the subsidised fee scheme of Aiming High. While the issues relating to educational and economic disadvantage are not *as sensitive* as other topics studied in the social sciences,

there is a need to show sensitivity in this research process for it can potentially affect almost every stage of the research process from the formation of the research problem, through to the design and implementation of a study (Lee, 1993).

At the coalface, no differentiation is made to those students who enter CTYI through the Aiming High access route. While there are mechanisms in place during the administrative stages in relation to admission and the processing of applications, no distinction is made to students during the assessment or throughout the duration of the programme to flag the student in any way from their peers on the programme.

It was made clear to all possible research participants at the notification stage of the research that the involvement was voluntary. In relation to the data collection phases; Cohen, Manion and Morrison (2004) suggest that the sequence and framing of the questions is an important consideration to address with *easier* and non-threatening questions being recommended during the earlier stages of the interviews so as to put the respondents at ease. With focus groups, Richie and Lewis (2003, p.58) maintain that such a method has the advantage of being a good arena for the discussion of sensitive topics if people within the group have "...similar proximity to or shared experience of the issue". A number of other factors are also important within each focus group and interview and these included; the creation of a rapport with the participants involved, a demonstration of interest and respect, the ability to respond flexibly to the interviewee, being able to show understanding and empathy, and remaining adaptable to the participant's responses (Richie & Lewis, 2003).

Finally, it is worth mentioning that a sensitive issue for one individual may not be the case for another. The sensitivity of a topic is not fixed-rather it is socially constructed with one person's 'no-go area' being perfectly acceptable for another (Barbour, 2008, p.18).

3.3.4.3. Audience of the Research

When conducting research, the audience of such work often is important to consider (Yin, 2009; Stake, 1995). Of course, first and foremost, the primary concern of the researcher is producing a body of work which stands up to merit in *a viva voce*. The overarching aim of the research is to create and develop a well-rounded study so as to add to the knowledge within the gifted education field. On a practical note, as this research study is commissioned by CTYI, it is hoped that any recommendations made will be taken into account for possible changes to programming within the Centre. Finally, this study may also have implications for future policymakers within the field.

3.3.5. Evaluating Qualitative Research

An important consideration in the design of a research study is being able to evaluate its quality. Essentially, this deals with establishing the trustworthiness of a study, or “demonstrating to the audience that the findings are worth paying attention to” (Lincoln & Guba, 1985, p.290).

The traditional labels associated with evaluating more positivistic or quantitative research studies, such as *validity* and *reliability* are not seen as compatible with the researcher’s worldview within this study. As an alternative, Lincoln and Guba (1985) put forward alternative criteria and terminology for evaluating research; ‘*credibility, transferability, dependability, and conformability*’. Below, each of the four shall be considered in order to demonstrate the trustworthiness of the study’s findings.

3.3.5.1. Credibility

The notion of credibility concerns itself with the question: ‘are the findings credible given the information presented?’ Lincoln and Guba (1985, p.301) suggest a number of different techniques to establish the credibility of a research’s findings, two of which are *prolonged engagement* and *triangulation*. Prolonged engagement involves the immersion into the site of study, in order to ensure that the context is “thoroughly appreciated and understood”, and so that any distortions are taken into account which may “creep into the data” (Lincoln & Guba, 1985 p.302). The study’s research timetable (Figure 3.4.) outlined above illustrates how data collection became spread out over a number of years and not just at one specific point in time.

Different modes of triangulation have also been suggested to increase the credibility of a study’s findings. Within qualitative research, data can be collected from an array of sources and in a multiplicity of ways so as to enable the researcher to make sense of a complex phenomenon (Patton, 2002). With case study research, there is a clear rationale for using multiple sources of evidence. Yin (2009) believes that the most important benefit of using a number of data collection techniques (interviews, focus groups and questionnaires) is that it allows for the development of converging lines of inquiry, and a process of ‘*methodological triangulation*’ which can strengthen the case and the findings of the research. As parents and school personnel occupy such a crucial role in the lives on the young people, these cohorts were also included as a source of ‘*data triangulation*’ (i.e. collecting information from multiple sources but aimed at corroborating the same fact or phenomena) in order to increase the credibility of the findings (Patton, 1980). By examining different sources of evidence, one can “build a coherent justification for the themes which are presented” (Creswell, 2003, p.196). If the themes put forward are based on several converging perspectives and data sources one can improve the probability that the findings will be regarded as credible. The use of different participant

groups (current students, previous students, parents, and guidance counsellors) and methods (questionnaires, interviews and focus groups) were all used as a technique of triangulation and in order to strengthen the study's findings (see Figure 3.3).

3.3.5.2. Transferability

The transferability of a study is the degree to which the results of the study can be applied to different contexts. Such an outcome was not an aim for the researcher per se. Even so, the onus is on the researcher to provide a "thick description" of the phenomena occurring so that the reader can determine its relevance and transferability. "It is the reader, not the researcher, who determines what can apply to his or her context" (Merriam, 2009 p.51).

Yet, with this said, this study aims to generate an in-depth and comprehensive account of the Aiming High case so that aspects of the initiative may be transferred or replicated into other settings or different contexts if suitable and desired.

3.3.5.3. Dependability and Conformability

Dependability relates to the extent which research findings can be replicated with similar subjects in a similar context with *conformability* being the degree to which the findings can be confirmed or collaborated by others. Due to a range of unpredictable factors within qualitative research, gaining the same findings under the same circumstances can be considered virtually impossible. As qualitative research does not aim to be replicated, in order to address the dependability issue more directly, the processes within the study should be reported in detail, thereby enabling a future researcher to repeat the work, if not necessarily to gain the same results.

In relation to conformability, Lincoln and Guba (1985) suggest that the major technique for establishing conformability is through the creation of an “audit trail”, in which an observer can trace the course of the research via the decisions made and procedures described. The *case study database* explained above became the strategy chosen to help establish conformability and to establish rigour within the study (Yin, 2009).

3.4. Conclusion

This chapter aims to give an overview of the research design which shapes this study. The chapter is largely guided by using a model put forward by Denzin and Lincoln (2011). This model assists in providing structure to the various elements of how the research study was designed. Specifically, and in relation to this study, an interpretivist worldview overarches the conduct of the research. A qualitative case study encompasses the research strategy which guided the collection of data. Data was collected from four sets of research participants and by using three types of data collection tools. The data was analysed using the *constant comparative method*, and the research was evaluated using the components suggested by Lincoln and Guba (1985). In essence, the chapter intended to lay the foundation and to provide the reader with the information as to how the research was conducted. The chosen methodology of case study recognises the importance of the contextual landscape in which the case lies; the next chapter will consider 'the Context of the Case' in detail.

Chapter 4- The Context of the Case

4.1. Chapter Introduction

Chapter Four aims to outline the context of the programme, as well as providing detailed information about the programme itself. It is imperative to explicitly outline the context of the case prior to the study's findings as such contextual knowledge can contribute to a better understanding of the case.

In relation to how such contextual information fits with the study's methodology, Merriam (1988) asserts that a core feature of case study research is the rich portrayal of the setting in which the case is located. Baxter and Jack (2008) also recognise the importance of the context within a case study as it allows for the phenomenon to be studied in the context which it is occurring, while Patton (1990) believes that such information is necessary so that the reader can be taken into the programme's life.

Yin (2009) suggests that this descriptive contextual information should precede the main body of findings, therefore, this chapter is structured in a number of distinct areas which will assist in understanding the case but which will also help to frame the main body of findings contained in the next chapter.

The first part of the chapter will briefly outline the broader landscape of where the need for such a programme originated; specifically it will outline the role of external (to CTYI) organisations which are at the forefront of targeting students from under-represented groups within the Irish higher education system. These bodies are important to acknowledge as they contribute to and further justify the need for such a programme.

The second section will focus on the current initiatives by CTYI which are targeting students from socio-economic disadvantaged schools. Particular attention will be given to the uptake of participating schools within Aiming High. This account will lead into a detailed description of the programme itself, and an overview of the demographics of the students who have completed the summer programmes.

The third area to be covered will contain what is involved for a student when participating on the programme; specifically, a description of the campus itself, a breakdown of how the programme is organised, and the daily timetable for students participating in the programme.

Fourthly, the stakeholder groups which impact on the student experience within the programme shall also be identified. There will be particular focus given here to the role of two of these groups, schools and parents. This section will contain some of the findings from the study in relation to the role of the school authorities and parents in contributing to the student's experience within the case.

The final section of the chapter will be dedicated to exploring the vital role of the scholarship from the perspective of each of the participant groups.

While these sections are in some way divergent, when combined, this chapter aims to provide a solid foundation for the following chapter which outlines the main body of findings within the study.

Figure 4.1 provides an overview of the various parts of the chapter.

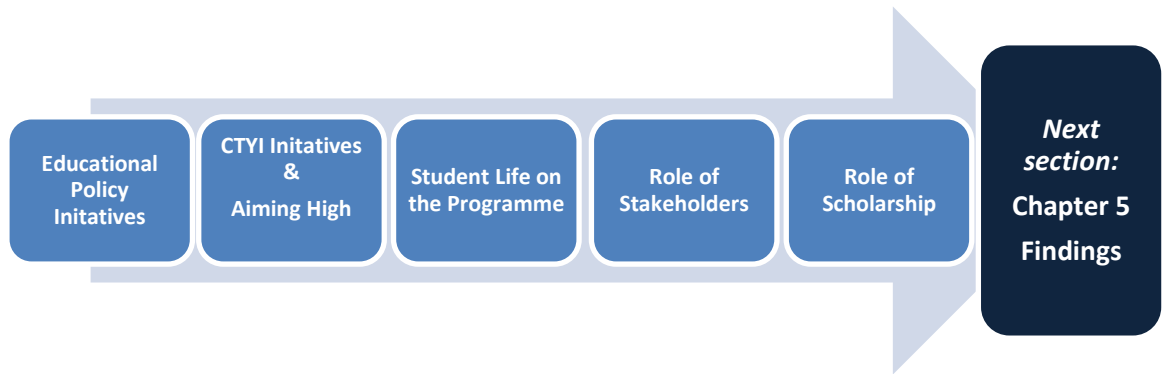


Figure 4.1 Structure of the *Context of the Case* Chapter

4.2. Providing Access to Underrepresented Groups within Higher Education

4.2.1. The National Access Programme

First and foremost, it is important to situate the research in the context of educational policy initiatives within Ireland. The most notable of these initiatives comes from the National Office for Equity in Access to Higher Education which was established by the HEA in 2003. The aim of this office is *to make it easier* for traditionally under-represented groups to access higher education opportunities within Ireland. Such under-represented groups include those who are disadvantaged socially, culturally and economically (HEAR, 2013). The organisation works with universities and third-level colleges throughout Ireland with the goal of achieving an equitable education system for all. Under the National Office, all of the Access centres across the third-level institutions within the country adhere to an agreed and shared strategy (*the higher education access route* (HEAR)) to ensure disadvantaged groups are better represented in third-level education (McCoy et al., 2010).

4.2.1.1. The DCU Access Service

The DCU Access Service has a significant part in relation to providing a background to this study. Within DCU, this organisation implements the strategies put forward by the HEA and the National Office in targeting students typically under-represented in higher education (i.e. students from socio-economic disadvantaged backgrounds, from ethnic minorities, and from the Traveller Community). One of the service's central aims is to empower and support students from socio-economic disadvantaged backgrounds to realise their full potential (DCU Access Service, 2011). To help it achieve this aim, the service provides a range of supports to secondary schools in near proximity to the

university which include; the facility of extra support and advice to teachers and schools, the provision of financial, educational, personal, professional and academic supports to third-level students (DCU Access Service, 2011). Furthermore, it offers more flexible entry requirements into university courses for students from socio-economic disadvantaged backgrounds which are in line with guidelines from the National Office for Equity of Access in Higher Education and the HEA. This organisation is a vital intermediary in this research project as students who participate in the Aiming High initiative are second-level students who attend one of the DCU Access linked schools.

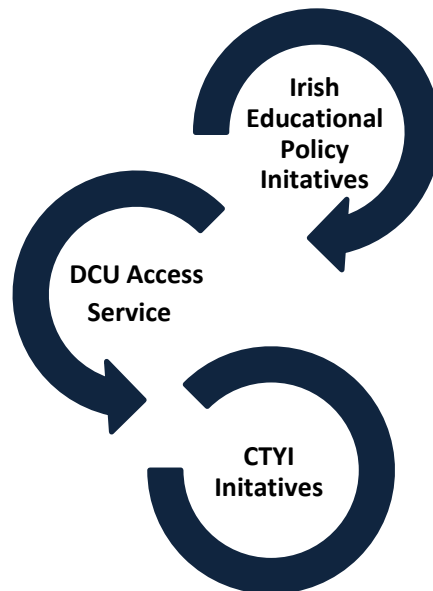


Figure 4.2 Creating a link from Irish educational policy to CTYI initiatives targeting high-ability, low-income learners

4.3. Initiatives at CTYI for High-Ability, Low-Income Students

Within CTYI, there are currently two programmes which target high-ability, low-income families from the disadvantaged areas surrounding the university; the Centre for Academic Ability (CAA) which focuses on primary school students and *the case* of this study, the secondary school programme, Aiming High.

This following section aims to explain briefly the CAA programme and how it has laid the foundation for Aiming High. Following a brief overview of the CAA programme, a detailed description of the Aiming High initiative will be given.

4.3.1. The Centre for Academic Ability (CAA)

The Centre for Academic Achievement (CAA)⁸ was launched in 2006 as a collaborative project between CTYI and the DCU Access Service. The decision to begin such a programme was taken after a needs-analysis report from local primary school principals highlighted the lack of support for bright students in disadvantaged areas (Tobin, 2006). The CAA programme focuses on an after-school academic enrichment courses for “potentially gifted students” from disadvantaged backgrounds (Healion & O’Hara, 2015). The students who participate in this programme attend one of the 32 local DEIS primary schools in North Dublin and are aged between 10 and 12 years old. In order to be eligible, each student is nominated by their class teacher to take part in the academic classes which take place on the DCU campus over the academic year (Healion & O’Hara, 2015). Within the CAA programme, class teachers are given specific criteria which can be used in order to assist with the identification process, these criteria includes choosing students who come from families from a low socio-economic group and students who do not have

⁸ The CAA programme was at the centre of a doctoral thesis by Healion (2013) - see section 3.3.2.

a history of higher education within their families. Interestingly, no such information is given by CTYI to the secondary schools who participate in the Aiming High initiative to assist them with the nomination process.

4.3.2. Aiming High

Aiming High was launched in 2010 and furthered the collaboration of CTYI and the DCU Access Service. Under this initiative, students from the DCU-Access linked secondary schools (aged 13-17 years old) are given the opportunity to sit the Talent Search assessment at CTYI. This assessment is necessary in order to ensure their eligibility into one of the summer programmes. The main goal of Aiming High is to integrate the students who have *graduated* from the CAA (primary-school courses) into the mainstream CTYI programmes, while also identifying and developing academic ability amongst other high-ability students.

Many of the objectives of the Aiming High programme incorporate those of the CAA (Healion, 2013, p.22).

The objectives of Aiming High are:

- To encourage students to be interested in learning outside the school environment
- To encourage students to take an interest in subjects outside the curriculum
- To challenge students academically
- To give students the opportunity to meet other students of similar ability
- To offer courses similar to those studied at university
- To offer students the opportunity to access university facilities (e.g. computer and science labs; sports facilities etc.)
- To encourage students to embrace university life by basing the classes within a university campus
- To provide support to schools to tackle educational disadvantage
- To promote positive attitudes to education in the community

- To encourage parents to support academic achievement
- To build up a relationship between students, parents, schools and the local community with the DCU campus

The Aiming High initiative at CTYI aims to provide students from socio-economic disadvantaged communities a taste of university life while studying university style courses in a higher education environment. Students also are given the unique opportunity to access university-style facilities while being surrounded by students of similar ability.

4.3.2.1. Participating Schools

Twenty-four (now 23⁹) secondary schools are given support and services by the DCU Access Service. These 24 schools include; 19 designated DEIS schools by the DES, as well as five other secondary schools who do not have official DEIS status but which do not differ significantly from the official status schools (Smyth, Mc Coy & Kingston, 2015).

Over the last number of years, there has been considerable demand from other DEIS schools around Dublin for placement into Aiming High. This, in turn, raises the issue of funding for these students. As funding is limited, each school outside the DCU-linked cohort is considered on a case-by-case basis by the Director of CTYI. Overall, this category remains small in comparison to some of the other schools; however, these students must be included within the research as they contribute to the student participation levels within the programme.

⁹ As of September 2014, there are only 23 DCU Access-linked schools with the merger of Mater Christi and Patrician College. As the majority of data collection was carried out prior to this merger, for the purposes of the thesis, they will be separated into two schools.

Within this study, in order to ensure the anonymity of each of the schools, each school was assigned a letter. This coding system allowed each school to keep their anonymity within the research while also allowing each to be clearly identifiable. Importantly, this coding system of the respective schools will also be extended onto the findings themselves so that each participant can be linked back to their corresponding school (see Appendix A).

4.3.3. School Participation

The uptake of students from the participating schools varies significantly from school to school, and indeed from year to year.

Since 2011, 260 students have participated through the Aiming High initiative. The below table (Table 4.1) identifies each school by a letter, and states the school enrolment policy. With regard to the enrolment of the schools, seven are all-female, seven are all-male and eleven have mixed enrolment policies.

The table also provides a breakdown for the number of students attending annually from the various schools. It is evident from the table that participation on the Aiming High programme varies significantly for each school. For example, the highest participating school (K) comprises of 15 percent of student places while four schools (school ID: C, L, O and V) have only had one student participating on the programme. Interestingly one of the schools has had no students participate in the courses. Upon closer inspection, this is due to the school actually being a college of further of education which has close links to the university but does not have any second-level students. It is necessary to acknowledge this category as it is linked to the DCU Access Service. The category Y comprises the supplementary DEIS schools around Dublin which are outside the catchment areas which the DCU Access Service cover but which have been accepted into the initiative as *special cases* by the Director of CTYI.

School ID	Enrolment	DEIS/ NONDEIS	2011	2012	2013	2014	Total	%
A	Mixed	DEIS	0	0	0	0	0	0
B	Mixed	DEIS	1	1	1	2	5	1.92%
C	Mixed	DEIS	0	0	1	0	1	0.38%
D	Mixed	DEIS	2	0	1	1	4	1.54%
E	Female	DEIS	2	2	4	2	10	3.85%
F	Male	DEIS	2	2	2	2	8	3.08%
G	Female	DEIS	0	1	2	1	4	1.54%
H	Female	DEIS	1	2	7	13	23	8.85%
I	Female	DEIS	1	1	3	3	8	3.08%
J	Mixed	DEIS	0	2	3	6	11	4.23%
K	Mixed	DEIS	7	4	14	15	40	15.38%
L	Mixed	DEIS	1	0	0	0	1	0.38%
M	Mixed	DEIS	6	4	3	10	23	8.85%
N	Mixed	DEIS	3	1	1	3	8	3.08%
O	Male	DEIS	0	0	0	1	1	0.38%
P	Male	DEIS	1	0	3	5	9	3.46%
Q	Mixed	DEIS	1	1	1	3	6	2.31%
R	Male	DEIS	2	3	8	8	21	8.08%
S	Male	DEIS	4	4	7	8	23	8.85%
T	Female	NONDEIS	1	0	3	4	8	3.08%
U	Female	NONDEIS	5	0	1	1	7	2.70%
V	Male	NONDEIS	0	1	0	0	1	0.38%
W	Male	NONDEIS	6	6	0	0	12	4.62%
X	Female	NONDEIS	2	4	3	2	11	4.23%
Y	Mixed	DEIS	0	0	3	12	15	5.77%
Total			48	39	71	102	260	100%

Table 4.1 Student participation by school in Aiming High 2011-2014

4.3.3.1. Researching the Schools

In relation to researching the various schools, two different questionnaires and three interviews were carried out with guidance counsellors from the respective Access schools. Appendix F presents a table with a breakdown of the data collection which was carried out with the various guidance counsellors. In total, there were 16 questionnaire responses, as well as the three interviews completed.

4.3.4. Student Participation on the Programme

As has already been noted, over the four years of the programme, 260 students have participated in the Aiming High initiative. The number of students participating annually has varied across the four years. In 2011, 48 students participated in the courses, this dipped slightly in 2012 when the number dropped back to 39, and then rose significantly in 2013 when the number of students taking part in the courses climbed to 71. This sharp increase continued into summer 2014 with 102 students taking part in the summer courses at CTYI. The lower attendance levels in 2012 may be attributed to how the programme initially targeted students in the second-half of secondary school studies (4th and 5th years) during the first two years (2010 and 2011). Consequently, in 2012, they would have been outside the age range necessary to take part. In 2013, the age range was widened and students across all years in secondary school were encouraged to apply.

The next section aims to give detail and provide an overview of the special population of students who have participated in the summer programmes at CTYI since 2011.

Gender of participants

From 2011, in relation to the gender of participating students, more males than females have taken part in the summer programmes at CTYI. Table 4.2 provides a detailed record of the gender composition from 2011-2014.

Gender	2011	2012	2013	2014	Total	%
Male	27	22	42	55	146	56.15%
Female	21	17	29	47	114	43.85%
Total	48	39	71	102	260	100%

Table 4.2 Gender breakdown of the Aiming High programme 2011-2014

Unsurprisingly, the number of males within each programme also outnumbered those of females.

Programme Breakdown	CTYI	CAT	SS	Total	%
Male	43	59	44	146	56.15%
Female	32	45	37	114	43.85%
Total	75	104	81	260	100%

Table 4.3 Programme breakdown of male-to-female on the Aiming High programme 2011-2014

Age of participants

The age of participants has also varied over the number of years the programme has been underway. Overall, there is no major trend in relation to the age of students taking part in the programmes. However, it is clear that the number of students participating in the programme at 17 years old is relatively lower when in comparison against other age groups. This may be attributed to students now being identified during their initial years of secondary school, rather than during later years. The below table (Table 4.4) highlights this, and provides an overview of student ages from 2011-2014.

Age	13 years	14 years	15 years	16 years	17 years	Total
2011	4	11	11	18	4	48
2012	7	10	8	12	2	39
2013	16	23	17	9	6	71
2014	25	23	26	19	9	102
Total	52	67	62	58	21	260
Total %	20%	25.77%	23.85%	22.31%	8.08%	100.0%

Table 4.4 Age breakdown of students on the Aiming High programme from 2011-2014

Programme Composition

In relation to the composition across the three programmes (2011-2014), the majority of students have taken part in CAT courses, followed by Summer Scholars, and finally CTYI.

The below pie-chart illustrates the breakdown of student participation between the three programmes.

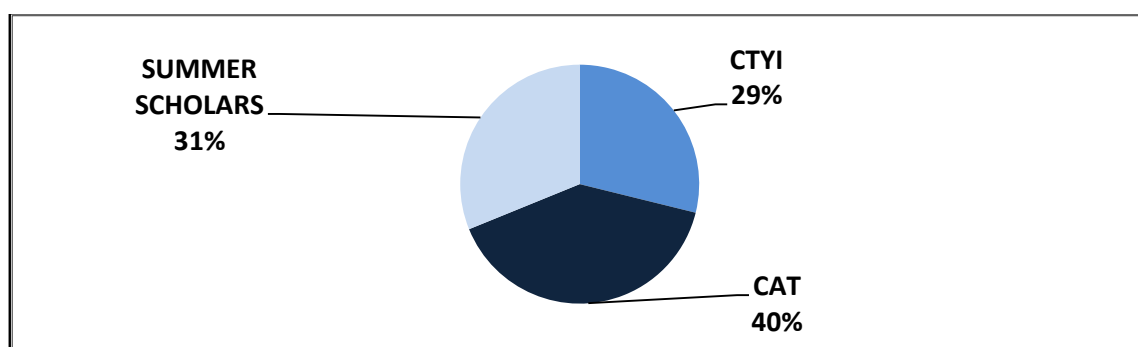


Figure 4.3 Programme composition according to older student CTYI programme from 2011-2014

Assessment Qualification Information

The CTYI Talent Search determines which older student summer programme a student is eligible for. The CTYI Academic Programme is open to students who score in the 95th percentile or above in the Talent Search. The Centre for Academic Talent (CAT) programme is open to students scoring between the 85th to 95th percentile, while the Summer Scholars programme is for students scoring below the 85th percentile.

From CTYI student records, 64 Access students sat the Talent Search 2015. Of this group, 29 qualified for Summer Scholars, 23 qualified for CAT, and only 12 qualified for CTYI. Interestingly, 11 students directly applied for the Summer Scholars programme without sitting an assessment. Yet in terms of programme applications from Summer 2015, the CAT programme has the highest percentage of participating students (42.97 percent), followed by Summer Scholars (31.25 percent) and finally by CTYI (28.78 percent). The figures from the student applications support the findings from previous years that the largest amount of participating students take CAT courses.

Returning Students

A striking finding was the number of students who took part for more than one year. As stated previously, students are able to come onto the programme as many times as they wish under the scheme until they go into sixth year. It is clear from the below figures that the number of students returning each year is increasing. For example, in summer 2014, the number of returning students has more than doubled from the summer 2013 levels.

New & Returning Students	2011	2012	2013	2014
New		23	45	43
Returning		16	26	59
Total	48	39	71	102

Table 4.5 Breakdown of new and returning students to Aiming High 2011-2014

Overall Student Participation

The number of Aiming High students taking part in the summer programmes at CTYI in summer 2015 was nearly 12 percent of the overall student cohort. This finding is illustrated on the below pie chart.

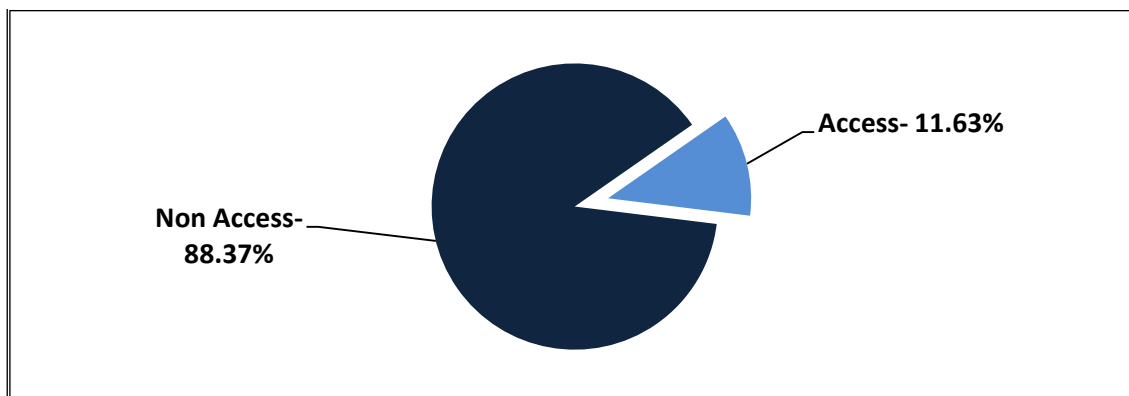


Chart 4.1 Breakdown of Access and Non-Access Student Participants in the older student summer programmes 2015

Researching the students

While the research design chapter provides a detailed account of the specific methodological issues which need consideration when researching the students on the initiative, there are a number of important elements to note at this juncture.

A sample of students from the full cohort were studied as part of the data collection effort. In total, 104 questionnaires were completed by the current and previous students. In addition, 24 students were interviewed across the data collection phases (summer 2012, 2013 & 2014) when the interviews and focus groups are combined.

Appendix A gives a detailed breakdown of the research participants for this study. This appendix provides information including the year of participation, the student's school, the subject taken, the participant's age and the method of data collection used.

The above section (section 4.3) aimed to provide an overview of the Aiming High programme and vital information with regard to the student composition on the programme. The *life of a student* on the CTYI programmes shall be considered in the next part of the chapter as it provides further context and is helpful in understanding the student experience at CTYI.

4.4. Student Life on the Programme

This segment of contextual case information outlines details relating to a student's life while on the programme. These details are important to present in order to give the reader a sense of "being there" (Stake, 1995).

Merriam (2009, p. 259) agrees with Stake (1995) in presenting contextual background material to the reader so as to generate a better understanding of the case; "...in order for a reader to vicariously experience a phenomenon the writer must transport the reader to the setting. This is done through writing a vividly descriptive narrative of the setting and the situation." (Merriam, 2009, p.259)

In order to convey a sense of *being there* for the reader through using words, I will begin by providing some detail into the campus layout itself. This will be then followed by an explanation of the daily student timetable to which all students must adhere to.

4.4.1. The University Campus

Within its 72 acre site, Dublin City University organises its departments into five major facilities; the Faculty of Humanities and Social Sciences, the Faculty of Engineering and Computing, the Faculty of Science and Health, and the DCU Business School. Within the campus, there are also a number of residential halls for the undergraduate and

postgraduate students, as well as sporting facilities and a variety of retail outlets and service providers.

The *CTYI Site Office* is the nerve centre in the management and organisation of its programmes. In the site office, students may seek assistance from one of the senior members of staff who can clarify any queries relating to their programme. This office also acts as the sign-out location for all students when leaving campus.

Prior to the commencement of the summer programmes, each subject is allocated a classroom by an academic co-ordinator within CTYI in one of the permitted areas on the campus. For the students participating in the summer programmes at CTYI, strict rules exist as to the permitted and prohibited areas on campus. All students are informed about these areas during programme orientation.

Appendix G presents a campus map of the university. The CTYI Site Office is located in the Pavilion Building.

4.4.2. Central Features of CTYI's Programmes

The programmes at CTYI aim to provide academically challenging learning opportunities to young people from the ages of 6-17 years old. The classes give “normal children with wonderful brains” the opportunity to realise their potential and to serve students with outstanding talent (Ybarra, 2005, p.23). To achieve this aim, CTYI runs a Talent Search (see section 2.3.2.1) to assess students’ verbal and mathematical reasoning abilities. This above-level test gives students the opportunity to demonstrate their advanced intellectual abilities.

Ybarra (2005) suggests that academically challenging programmes are needed for high-ability students, as it is often these students who may not receive the support to develop their talents to the same extent as those with musical or sporting abilities;

“Children with abilities in any area like to be able to use their talents and in many areas we support efforts to build proficiency. A child who excels at the violin gets concentrated help in that area. A young soccer star can join the travel team and get recognition and support...Yet, although we often nurture a student’s musical or athletic ability by focused instruction on that single subject, when it comes time for us to help students make the most of their academic abilities we fall short...in ensuring that high academic ability is also nurtured and supported” (p.24).

CTYI offers academically challenging, rigorous and fast-paced educational opportunities in order to cater to the needs of high-ability students. In the case of summer programmes, students spend between two and three weeks studying one subject throughout the course of the programme. Each day, students may spend as much as seven hours on one particular subject between class and study time. As stated in a previous chapter, courses span a range of fields in the areas of arts and science, as well as the disciplines of engineering and computer science. One of the most defining characteristics of CTYI’s courses is that they are taught at a standard and at a level well above the material and the content which is been taught in school for that age-group (Barnett, Albert & Brody, 2005). In some courses, students study standard school content at an accelerated pace (e.g. Business), while in others they learn content not usually available to students their age (e.g. Game Theory). There has been extensive research studies conducted on the CTY model both in CTYI and in CTY Johns Hopkins.

According to research from CTY Johns Hopkins, there are fundamental advantages to providing educational opportunities geared at gifted students which include; achievement gains and increases in content knowledge, improved thinking and study skills, and the increased likelihood of students seeking more rigorous and advanced classwork on their return to school (CTY, n.d; Ybarra, 2005).

CTYI classrooms are characterized by a number of features in order to cater to the needs of high-ability students and these features are outlined below: (CTY, n.d.)

- high expectations for student performance
- low student/instructor ratios
- teaching staff who are well versed in their fields
- motivated students
- active student participation
- flexible instruction

The teaching staff are a central part of CTYI's programmes. CTYI instructors are "a talented and varied group of individuals brought together by their commitment to the education of high-ability students" (Barnett, Albert, and Brody, 2005, p.35). CTYI recruits instructors and teaching assistants who are outstanding graduate students, teachers and working professionals who "are well versed in their academic fields and have the curricular and pedagogical resources of CTY at their disposal" (p.35). Another feature of the CTY classroom is that the student: teacher ratio is also kept intentionally low in order to best attend to each student's individual needs.

As well as focusing on developing students' academic talents, the programmes at CTYI also aim to cater to students' social development. The programmes provide students with "the opportunity to learn and socialise with peers who share their high abilities and their love of learning" (Barnett, Albert and Brody, 2005, p.35). As well as undertaking their academic course work, students also have the chance to enjoy a rich experience outside

the classroom by taking part in activities ranging from sports to arts and crafts to special events (e.g., student talent shows, dances, or socials). The following section aims to provide more detail as to the lives of students while on the programme at CTYI.

4.4.3. The Student Timetable

Classes commence at 9am, and run Monday through Friday. Every classroom, or in certain cases, computer or science laboratories, are located throughout the campus. Each class comprises of approximately twenty students, an instructor, and a teaching assistant.

The academic classes run from 9am to 3pm with a short break (15 minutes) and lunch (1 hour) in between. Although each subject varies with regard to content; all the courses are designed to help students learn course material they would ordinarily get to study in school, to challenge student academic abilities and to facilitate class discussion. Throughout the courses, fieldtrips are often organised by the class instructor in order to supplement the material being learnt inside the classroom. Classes finish at 3pm, at which time students have the opportunity to participate in a wide variety of activities which are organised by the residential staff. For these activities, students are allocated into small groups depending on their activity choice. It is through this social time, that students typically make friends outside the classroom setting. Appendix I provides a sample of a number of the recreational activities which students can take part in during the summer programmes. Dinner follows the recreational time at 5pm. In the time between dinner and study, students are also given the opportunity to meet in smaller assigned groups which are overseen by dedicated members of staff to discuss any issues they may be experiencing. At 6:30pm, student study time commences. Students assemble according to their class to complete any assignment prescribed by their instructor during the day. This study time finishes at 8:30pm. For the following ninety minutes, students have additional

free time to socialise. At 10pm, all remaining commuting students must sign out, and all residential students must go to their rooms, with lights out at 10:30pm.

For the commuting students, the earliest time a commuting student may sign out is 3pm, with the latest time being 10pm. They also may sign out at a number of different intervals throughout the evening (5pm, 6:30pm, 8pm, and 10pm). Commuting students are strongly encouraged to stay for the full day and participate in all programme activities, academic and otherwise.

Table 4.6 displays the summer programme schedule for all students.

Summer Programme Schedule (Monday-Friday)		
9:00am	Class (includes 15 minute break)	
12:00pm	Lunch	
1:00pm	Class resumes	
3:00pm	Recreational Activities	<i>Optional for commuters</i>
5:00pm	Dinner & Group Meetings	<i>Optional for commuters</i>
6:30pm	Study	<i>Optional for commuters</i>
8:30pm	Social time	<i>Optional for commuters</i>
10:00pm	Residential students must go to their rooms	<i>Commuters must sign out at this time</i>

Table 4.6 Weekday daily student schedule

4.4.3.1. Weekends at CTYI

At the weekend, there are no classes, instead the recreational staff organise daytrips for students. For commuting students, taking part in the weekend activities at CTYI is optional. Typically, the weekend activities include; excursions to historical, cultural, and sporting venues around Dublin. Evening events are also arranged for students upon their return to DCU and these usually comprise of table quizzes, discos etc.

4.5. Programme Stakeholders

Throughout the phases of data collection, six key stakeholder groups were judged to have had an impact upon the experience of students being considered in this case. Below each is outlined and explained.

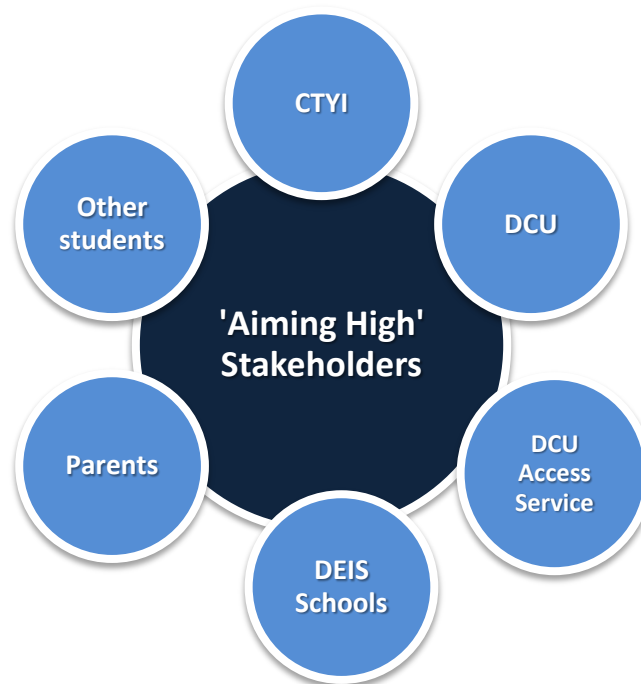


Figure 4.4 Programme stakeholders impacting on the student experience at Aiming High

- The case organisation- the Centre for Talented Youth, Ireland (CTYI)
- Dublin City University (DCU)- the university campus on which the programme takes place
- The DCU Access Service- the university department which liaises with the participating schools, and CTYI
- Schools- the DCU Access DEIS-linked secondary schools
- Parents- of the students participating on the programme under the Aiming High scheme
- Other Students- (i.e. students on the programme who have entered through the *traditional* entry route)

The Centre for Talented Youth, Ireland

CTYI has the central role in the delivery of the academic programmes. The organisation is responsible for disseminating information to the Access Service, and then in turn to students and parents. Crucially, CTYI is responsible for the day-to-day running of the programmes from allocating and informing students of their summer course, to overseeing the hiring process of all the part-time summer academic and residential staff. This category contains all activities and all full and part-time staff in the organisation.

Dublin City University

The CTYI programmes take place on the DCU campus each summer. It is here that, students attend classes, participate in social activities, and get a flavour of university life. In addition, students have access to the facilities of the university throughout the duration of the programme. Accessing and maintaining a good working relationship with the university to avail of the facilities and services is paramount.

DCU Access Service

The university's outreach and civil engagement plan is enacted through the DCU Access Service. The Access office communicates with the 24 secondary schools to attract participants to sit the Talent Search at CTYI. The Access office also addresses queries and concerns from the schools, and is the crucial link between CTYI and the corresponding schools.

Schools

Twenty-four DCU Access linked secondary schools (i.e. North Dublin catchment area) comprise this category. The guidance counsellors, the principals and the class teachers all have important roles in identifying, providing support for students and communicating positive messages regarding the development of academic ability within the school environment.

Parents/ Guardians

This category relates to the parents of the students taking part in the Aiming High programme. Parental authorisation is necessary for a child to participate in the programmes. Parents may also provide encouragement and support, and in most cases, the financial resources necessary for these courses.

Other Students

This group contains students who participate in CTYI through the traditional entry route. These students come from a variety of socio-economic backgrounds, from all corners of Ireland and in recent years, the programme has attracted a growing number of international students.

4.6. Exploring in Depth: The Role of Schools and Parents

Of the six key stakeholder groups, the various school authorities and the parents of the participating students have a significant influence on the experience which students have within CTYI. Even though they are not involved in the delivery of the programme itself, these stakeholders work *behind the scenes* with students prior, throughout, and after the summer programmes. This next section will explore and elaborate on the role of schools and parents in relation to this case. There are findings dispersed throughout this section which were collected during the data collection phases of this study. It is vital to include this data within the Context Chapter as it assists in understanding the experiences of students taking part in the Aiming High initiative.

4.6.1. The Role of School Authorities

Firstly, to consider the role of the various school authorities (principal, vice principal, and guidance counsellor) who have an important role in influencing students' experiences within the programme. Of the various school authorities, it is often the guidance counsellor, with perhaps another senior member of the school's personnel who informs the student of their nomination for the assessment, who responds to parent queries and concerns, and who liaises with the DCU Access service and where relevant, CTYI. From the sample interviewed, each guidance counsellor had held the position for at least five years.

This section will be divided into four activities which commonly unite this stakeholder group, and these activities are summarised in Figure 4.5.

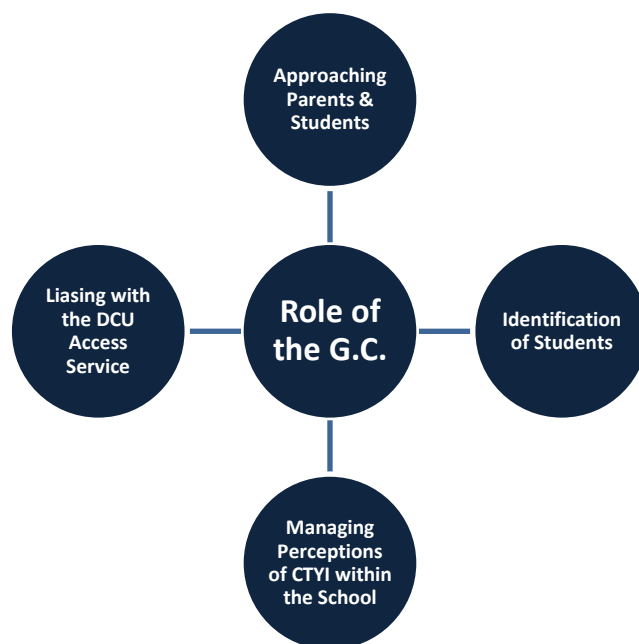


Figure 4.5 Role of guidance counsellors within the Aiming High programme

4.6.1.1 Approaching Parents and Students

Approaching Parents

The guidance counsellors are responsible (with perhaps another senior staff member) for contacting parents in relation to the assessment. Generally, the guidance counsellors believe that parents should be contacted at first instance before informing the students.

From the interviews, the guidance counsellors felt that approaching parents first was a good idea so that they could initially assess the reaction and interest from the parents before approaching students about the opportunity;

“I would initially ring the parents to gauge their interests because there is no point in sending the form home if the parents are not going to facilitate it.” (GC (S), 2013)

“We had to explain it to the parents. Parents might ask...because they have not heard about it or whatever so yes, we would explain it to them.” (GC (R), 2013)

Occasionally, the guidance counsellors reported they would initially approach the identified student with the information and follow-up with the parents at a later stage.

Whichever route pursued, all of the guidance counsellors agreed that they would contact the parents with a phone-call, or face-to-face, if required. This was considered important so that parents were adequately informed about CTYI, the entry process, and so that parents could clarify fully any queries which they had in relation to the financial cost of the programmes.

Approaching Students

The students were generally approached on the same day that their parents were contacted in relation to their nomination for CTYI. The questionnaire responses from summer 2014 corroborate that in the majority of cases, it is the guidance counsellor who informed the student of their nomination. From the sample of students questioned during summer 2014, the majority responded that they heard about CTYI from one of their school authorities, with a small number reporting that they had initially heard about CTYI from their parents after the school had contacted them first.

The guidance counsellors agreed that when approaching the students at first instance, a key aim was to make the entry process (i.e. the assessment) seem straightforward, informal and something which could not be prepared for;

“Once it is explained to them that this is a test that you don’t need to study for, they’re fine. So that’s the only concern they have.” (GC (R), 2013)

In informing students about the assessment, the guidance counsellors would all relate it to a similar previous experience from the school setting;

“I would say it’s just like the DATS. You go in, you do it, and out of that you will get something.” (GC (H), 2013)

Beyond the assessment, the guidance counsellors would address any concerns and queries which the students had about CTYI. The guidance counsellors or the various school authorities also used positive terminology when describing the benefits of programme participation.

One of the guidance counsellors phrased participation in the programme to students as follows;

“As a reward scheme...and something that will look good on their CV’s...I kept it simple (saying) that it will help you in your studies, it’s good for your CV and it will help your career choice.” (GC (S), 2013)

4.6.2. Identification of students

There are no criteria or information provided by CTYI to the participating schools to assist in the identification process. The schools have complete autonomy for deciding which students are identified for assessment with CTYI. Most of the schools started choosing students in their first year; though students from other year groups could also be chosen if deemed suitable, with the specific suitability criteria being decided by the school itself.

In terms of the identification criteria, it seems students are largely identified and nominated mainly based on their academic results in certain standardised school or state-level examinations (e.g. *DATS*, *CAT* scores, or Junior Certificate results). The guidance counsellors considered using academic results as the “fairest” approach to identify students to put forward for the Talent Search.

“It would be based around academic results...which are very important here.” (GC (H), 2013)

Although test results are the chief measure to identify students, the guidance counsellors also seemed to take other criteria into account before nominating students. These criteria vary according to the school, but include; teacher recommendations, attendance records (i.e. choosing students “that we think would turn up, who would follow through and who will go to the programme in the summer time...” (GC (H), 2013).

Interestingly, in one school, students self-selected themselves to take part;

“Some students do come forward and ask can they be a part of it. It is very hard to say no, and particularly knowing that the Summer Scholars programme is there.”
(GC (R), 2013)

As stated within the literature review, the area of identifying students from low-income families for academic programming opportunities is a major theme within the gifted education field. In all of the programmes identified in the Literature Review Chapter which cater to high-ability, low-income students (see section 2.3.3.2), guidance is provided to the schools by the organisations who manage the programmes in order to assist the relevant school personnel in the nomination process. Interestingly, at present, CTYI does not offer schools any information to assist them in deciding which students to send forward for the Talent Search. As a result, the participating schools predominately consider students who have scored highest on school tests. The *problem* with this practice is that nowadays the sole use of tests to screen and identify high-ability; low-income youth for academic programming opportunities is considered inappropriate (see section (2.3.2.4).

4.6.3. Managing the Perception of CTYI within the School

All the guidance counsellors interviewed were very complementary about CTYI and used positive terminology when describing the opportunities which CTYI provides for students; describing it as ‘*highly stimulating*’, ‘*all good in the extreme*’, and ‘*complementary to the career work done in the school*’.

The guidance counsellors all seem to recognise the opportunity which taking part provides, learning opportunities that would otherwise not be available to students;

“Oh sure it’s fantastic. It has opened up huge doors for our students really. Even the notion of summer camps and Irish College and all of that is a totally different world to them, which is quite extraordinary really.” (GC (H), 2013)

The guidance counsellors also perceived the programme to be a means to allow students to get an insight into third level education, and to see what university life is like;

“These programmes have greatly raised the confidence of our students who do not have a background of third-level education and have created a mentality that education is for all.” (GC (U), 2012)

“It can only enhance their life experiences and open up third level to them; by making it a reality, rather than something that they just hear about in school.” (GC (R), 2012)

One of the guidance counsellors saw that the programmes have numerous positive outcomes for students;

“It gives them greater confidence and greater self-awareness of their talent. It may challenge them outside the classroom environment with people on the same level as them. It gives them the opportunity to meet peers on the same wavelength, and it just integrates them better into the mainstream education setting. It is also good for their personal and professional development.” (GC (S), 2013)

Exploring the School Culture of CTYI within the Schools

Each school seemed to have a different *culture* when speaking about the opportunities in which CTYI provides. In some schools, the opportunity to participate and the students' experiences would not be openly talked about, while in others the achievement would be recognised and praised.

For instance, in one school, it was kept fairly *under wraps*;

“I wouldn't want them broadcasting it around the school...Because then I would have a load of first years saying why can't I do it? So it's not something I would publicise” (GC (S), 2013).

Whereas in another school, staff and students openly acknowledged it;

“We take the students' photographs to go on the website. They are a part of our open-night presentation where we talk about our CTYI students. We talk about their experience and how they feel...Students are very open about it. Because we have become very open about it and blowing the trumpets about it, it has made it ok to talk about it; so the students are telling each other about it.” (GC (R), 2013)

In the schools which openly acknowledge it and who talk about it, encouraging student participation did not seem to be a problem; the 'problem' rests with turning people away.

In a sense, it becomes a *positive problem*;

“Students are very open about it. Because we (the school in general) have become very open about it. We have made it ok to talk about, so the students are telling each other about it. Already, I have had students coming up this year giving me their names asking can they get involved- which is great.” (GC (R), 2013)

Gaining Feedback from Students Returning To School

At the most simplistic level, guidance counsellors reported that students enjoyed the experience of the summer programmes at CTYI.

In most of the schools, there is no formal procedure for students to give feedback on their experiences, and everything is kept relatively informal.

In a questionnaire distributed to guidance counsellors in 2013, when asked about the feedback students had given them about their experience, the vast majority of the guidance counsellors reported that it was largely positive. The guidance counsellors gave particular focus to the link between the courses in CTYI and the higher education environment which the students were able to experience themselves first-hand;

“The experience confirmed for one student his course choice, while for another it opened his eyes that a place at college may be for him (no one in his family has gone to college).” (GC (K), 2013, *brackets inserted by GC*)

“They really enjoyed the experience, they were excited about the course they were studying but also enjoyed experiencing “college life”, and meeting new people etc.” (GC (M), 2013)

4.6.4. Liaising with the DCU Access Service

As stated previously, the DCU Access Service offers a wide range of supports and services to the local DEIS schools, but most notably within this study, the Service liaises with the participating schools on CTYI’s behalf in order to provide information about the Aiming High scheme. This link and the relationship between the DCU Access Service and the corresponding schools is crucial, and one which needs to be maintained, developed when needed, and most importantly, sustained.

The guidance counsellors see their work in the schools, and the work of the DCU Access Service often intertwined;

“The Access schools programmes give the students confidence and affirm their aspirations to attend third level through first-hand experience. These programmes are very complementary to the career work done by schools and help make the college experience *real*. These programmes have greatly raised the confidence of our students who do not have a background of third-level education and have created a healthy mentality that “education is for all”. (GC (U), 2013)

One of the guidance counsellors, also pointed out that there needed to be a combined and united effort between the schools and parents in order for students to reach their potential academically;

“The activities offered by DCU certainly open the campus to our students and can plant a seed. I do feel though that the original seed needs to be planted at home. Schools and the DCU Access Service can only provide so much.” (GC (K), 2013)

While the DCU Access Service has an unquestionably important role in the context of this case, there was feedback given from one guidance counsellor in relation to the information which comes from CTYI which is important to recognise at this point;

“It is not crystal clear communication coming from CTY or wherever about this fee, so I have parents constantly ringing me saying they have to pay 70 euro or 50 euro or whatever. I have to double-check every year to make sure it hasn't changed. So if that could be clarified and cleared up, it would make my job a hell of a lot easier.” (GC, (S), 2013)

It cannot be stated enough how enormously important the role of the guidance counsellors and the other school authorities are in the context of this case.

It is from the schools involved where students initially hear and form impressions about CTYI. In most cases, it is the guidance counsellor who informs students of their nomination, and provides students with support and often reassurance throughout the process. The guidance counsellor also must communicate to parents about the special opportunity and provide clarity in relation to the outcomes and financial cost of the programme. In short, guidance counsellors are a key stakeholder group which greatly impact on the student experience for the students participating under the Aiming High initiative.

4.6.2. Role of Parents

Similar to guidance counsellors, parents also have a critical impact upon the student experience at CTYI. In order to understand their role, as part of the data collection effort, a number of focus groups were conducted with a sample of parents. In the context of this study, the role of the parents can be divided according to four main themes; addressing concerns, provision of emotional and financial support, and the facilitating the logistics of the programme.

Figure 4.6 provides an overview of each of these themes.



Figure 4.6 Role of parents within the Aiming High programme

4.6.2.1. Addressing Concerns

As the majority of the students taking part in the programme did not know anyone else prior to commencing the programme in CTYI, their parents played a vital role in addressing concerns and providing reassurance;

“She (the student’s mother) told me ‘you’re all in the same boat as everybody else.’” (Current Student, 15(H), SS, Humanities, 2013)

While the parents in many cases had never heard of CTYI before receiving the assessment application, through liaising with the school authorities, many of the parents turned into advocates for the courses and the opportunity when speaking with their child.

4.6.2.2. Providing Emotional Support

Throughout the whole process, (i.e. from hearing about the assessment and throughout the programme) many of the parents and at times, other family members provided emotional encouragement and support to the students;

“I have talked about it most with my family, like my mam and my sister because they would have the most interest in it, and they would give me positive reinforcement. Like when I tell them about my day, they say, it’s great. Like I feel great coming here, and I think they notice that. They give me encouragement to keep going with it.” (Current Student, 72(S), CTYI Criminology, 2014)

One parent conceptualised *the bigger picture* as the basis for encouragement;

“I think...it points out the importance of education. It also tells them that it’s alright to go for education; it’s alright to be bright. I’ve heard stories in the past that kids don’t go on (to university) purely because it wasn’t ok to be bright so they became disruptive in class because they got bored or whatever and they took the wrong path. I think the more that we can encourage them, they more they have to realise that if academic ability is, your talent, then it’s your talent. If football is your talent, then fine but if academics is your talent than good.” (Parent, 131 (S), 2014)

Another parent spoke of the help and guidance they gave their child about selecting their course choice;

“We sat there together, and studied the booklet and the course descriptions to pick his course. I read that instead of the Sunday papers!” (Parent, 126(S), 2013)

From the questionnaire responses, an overwhelming majority of students felt that their parents provided support and encouragement for them participating in the programme. The remaining minority felt that their parents did not provide encouragement to take part in the programmes. After probing one of the students about this during an interview, they felt that their parents “didn’t really mind either way”, and that he just wanted to “do it for himself” (89W). This student did however acknowledge that his parents had provided the financial support for him to be able to take up his place on the programme.

4.6.2.2.1. Providing Financial Support

In the majority of cases, the parents covered the financial cost of the programme fees, thus making it possible for students to take part in the courses in the first place. However, in a small number of cases, students said that they would contribute money themselves to cover the costs. This became most apparent during an interview with a student who was staying residentially of campus during summer 2012. As the cost of the residential fee is substantially higher to that of a commuting fee in order to cover the cost of living, less than a handful of students over the years have been able to stay residentially as part of the Aiming High initiative. Yet, as all the students within the Aiming High scheme live in communities close to the campus, for the majority of students, the daily commute is not too problematic and in many cases, preferred by students. When probed in the interview about his decision to stay as a residential student, he explained that he had attended the two summers previous as a commuting student and now wanted to experience the

residential side of student life. In order to meet the residential course fees, he had worked part-time over the year to meet the financial cost of staying on campus. The student felt that this decision had been worthwhile and allowed him to have “the full experience”, one that he said that he enjoyed immensely. When asked if he would apply for the following summer, he responded; “definitely”. True to his word, the student completed his final summer programme in 2013 as a residential student (Current Student, 69(S), CAT, Engineering, 2012).

4.6.2.3. Managing the Logistics of the Programmes

On a highly practical note, parents also provided transport and lifts to the campus for the duration of the courses, thereby often inconveniencing themselves somewhat in the process. While the vast majority of students under the Aiming High programme come from neighbourhoods close to DCU, there can often be considerable distances between their homes and the campus; and as a result, many students often rely on their parents for lifts.

In one case, a student who had just completed first year in school, and who did not live on a bus line to the university, faced difficulty in making his way to and from campus every day. As a result, his parents settled on his mother dropping him to campus every morning before she made her own commute to work. Then, in the evening, his father would collect him from the campus at 5pm, bring his child home, and then make his way to work for a night-shift. When I asked about this schedule, his father said, he didn’t mind as it was just a fortnightly arrangement and because his son was enjoying himself so much. The father also expressed that he himself was “over the moon” when his son got nominated in the first place to take part realising the “great opportunity” which participation in the courses provide (Parent, 119(F), 2014).

Similar to guidance counsellors, parents play an essential role before and during the summer programmes at CTYI. As well as providing emotional and financial support, parents also were found to show an important interest in their child's experience during their time in DCU. These two key stakeholders are vital to acknowledge in providing background to the case because although not present during the programme on campus, they work with students and indirectly impact on the student experience.

4.6.3. The Role of the Scholarship

The role of the scholarship is also an important factor in impacting on student experience within the programme. As explained previously, students under the Aiming High scheme may avail of subsidised course fees. This form of *scholarship*, as all sets of participant groups phrased it, was a major feature of many of the interviews and focus groups.

This section will be divided according to each of the three main participant groups; students, guidance counsellors and parents. While these various participant groups each voiced different opinions and concerns, there was a united awareness as to the importance of the scholarship. To put it simply, it was felt by the vast majority of the research participants that the scholarship initiative has *'opened up huge doors' and 'broken down barriers into a foreign world'* of third-level education which the students would not be able to enter without the availability of such funding (GC, 8(H), 2013).

4.6.3.1. From the Students' Perspectives

Current students spoke least about financial issues or how they were able to gain a place at CTYI through the scholarship scheme.

On the questionnaires, one student openly voiced her awareness about the cost of the courses and how such fee amounts can restrict students' ability to take part;

"I think people whose parents can't afford it should still be able to go. Just because they don't have the money, doesn't mean they don't deserve it."
(Current Student, 44(M) SS, Humanities, 2011)

In another questionnaire, a different student was extremely complimentary and proud about the opportunity which was given to him;

“I was able to attend CTYI because of a scholarship programme. I can happily say that the course was one of the best times of my life. I think that this scholarship programme is vital as it can benefit teenagers greatly.” (Current Student, 82(W), CTYI, Medicine, 2011)

Interestingly, one student acknowledged that her school was in a “disadvantaged area”, and as a result, she felt they lacked certain opportunities, resources and facilities within her school (Current Student, 14(H), SS, Law and Government, 2012).

4.6.3.2. From the Guidance Counsellors’ Perspectives

The guidance counsellors were all very supportive and grateful for the financial assistance provided under the scholarship scheme. In each of the three interviews, the guidance counsellors relayed how the funding provides students with an opportunity which they are unlikely to otherwise obtain.

Unsurprisingly, the guidance counsellors are aware of the financial pressures facing parents. After one of the guidance counsellors inquired about the cost of the course fees through the traditional entry route, the guidance counsellor described how parents would find it “impossible” to meet the regular course fees;

“I’d say the children that get in under Access would never in a million years have gotten into those courses otherwise. (When informed about the non-Access courses fees...) Yes, that would never happen for our students, yet again, it further pushes them out for what’s going on.” (GC (H), 2013)

In some cases, a number of the schools paid the subsidised course fees on the student's behalf, thereby relieving the financial pressure from the parents. In one of these schools which covered the course fees, the cumulative cost of the programmes was becoming an issue;

“We would love to put more students forward. I suppose if there was one drawback it would be, having to ask to families to pay anything...As our numbers increase, our concern is that we will have to ask for something from some of the families and that may stop some from going.” (GC (R), 2013)

4.6.3.3. From the Parents' Perspectives

When parents first heard about CTYI, and the assessment, their initial reaction was a concern over how much the course would cost. This became immediately apparent throughout each focus group conducted with this group;

“...I was looking at the money figures and thinking ‘oh this isn’t for us sweetie, we don’t have that money’. I didn’t want to be waving a carrot in front of a donkey. I was like ‘oh it’s fifty quid to do an exam which isn’t that much but then I don’t want to do that and then find out that the course is, you know, (really expensive) we can’t really afford that.” (Parent, 126(S), 2013)

“I was shocked first of all, and thought we couldn’t afford it (everyone else agrees- other participants in the focus group) and it was something that was going to cost me a lot and it was something that I would have to disappoint her with. But then when I heard about it (the financial subsidy), it seemed like it would be a great experience for her to be able to go.” (Parent, 124(M), 2014)

“He (her son) was hyper and excited, and I was having heart-attacks because I was looking at the little money figures and was thinking ‘oh this isn’t for us’, we don’t have that money.’ (Parent, 131(S), 2014)

Unanimously, all the parents agreed that they needed clarification from the school in relation to the course fees during the initial decision-making process. This was done either in person, “I went up to the school”, or over the phone, “just in order to verify stuff” (Parent, 131(S), 2014). These enquiries from parents were addressed to parent’s satisfaction by the various schools. With clarity received about the cost, and the CTYI in general, all the parents realised that it was a special opportunity for their child;

“He does realise that it is a brilliant opportunity for him and it doesn’t come often where we live. Like in a DEIS school, it just doesn’t happen.” (Parent, 126(S), 2013)

Overall, for the parents, the scholarship initiative made it possible for students to take part;

“Like our circumstances have changed, and if (*the student’s name*) hadn’t got a scholarship to take part in this, she wouldn’t be able to do it.” (Parent, 121(I), 2013)

“Initially when I saw the form, all I could see was €800 for the courses, and I’m like, oh no, ‘I don’t think this is for us’, and then when I rang her (the school principal) and she said, that you would be going for the scholarship. There were only three of them in his year that were given the forms so we knew that it was special.” (Parent, 131 (S), 2014)

Throughout the data collection, only one reference was made by a student (14(H)) to being *disadvantaged*. While there were a small number of references made by parents and guidance counsellors relating to the schools’ DEIS status, the word ‘disadvantage’ was never used. There were however, many instances of unease in matters relating to monetary matters, such as the high cost of the fees, and the inability of being able to send their child forward without the financial assistance provided by the scheme.

Interestingly, from the processing of student applications, an increasing number of students under the scheme availed of funding outside the home, for instance, through the school, and other organisations (e.g. St. Vincent de Paul) to cover the cost of the courses. In these cases, this alleviated the financial cost from the parents while still providing the students the opportunity to participate in the courses.

4.6.3.3.1. The Impact of the Recession

The economic downturn (2008-2014) has impacted on families and their circumstances in relation to discretionary income. A perhaps less inevitable outcome of such hardship is the unwavering emphasis on the importance of knowledge, and in turn, higher education.

The parents interviewed were extremely passionate about the important opportunities higher education can bring. Taking into account the hardship of the last number of years, there seems to be a great appreciation of the benefit of university education and the increased opportunities which this offers to young people;

“...Neither me or him (her husband)... (went to university) and like we are still in that rut, even in the recession, we see a job, ‘oh there’s a great job, oh wait, graduate’, there’s no point even applying. He’s in the civil service but again he knows he will only ever go so far because he doesn’t have a degree, and it’s the people with degrees that get promoted up.” (Parent, 126(S), 2013)

One of the students spoke about the recession in shaping his perception of further learning in the post compulsory schooling period. He felt that CTYI allowed him to realise that in the short-term he was taking action towards addressing his concerns about the avoidance of long-term financial hardship in future years;

“(In my school) I don’t think there is enough emphasis put on it (university). Like it’s a recession, it’s either go to college or sit around for the rest of your life...This has given me (the programme) more cop on than I did have. It made me grow up a bit. If you know what you want, you have to do these things, and make sacrifices for what you want.” (Current Student, 89(W), SS, Humanities, 2012)

The deep-rooted appreciation and the need for such a scholarship or funding emerged from the participants themselves. All the various participant groups commonly agree that such funding is imperative in the promotion of academic abilities amongst this capable group of adolescents.

4.7. Conclusion

This chapter pulls together a number of different areas which aim to assist in a greater understanding of the case. The first section considers the relevance of such a programme in the context of wider educational policy initiatives which focus on providing access to higher education opportunities for students coming from under-represented backgrounds. The second strand of the chapter details the current initiatives being implemented by CTYI which focus on high-ability, low-income students. There is significant background information given to the Aiming High programme which encompasses the aims of the programme, school participation within the programme, as well as exploring what is involved for the students when taking part in the programme itself. The programme's key stakeholder groups are also identified. Particular focus is given to the two key stakeholders; guidance counsellors and parents. The final section of the chapter focuses on the important role of the scholarship for students taking part in the programme. While each of these sections is quite disparate, when combined, they lay an important foundation for the main body of findings which shall now be considered in the next chapter.

Chapter 5- Findings

5.1. Chapter Introduction

This chapter outlines the findings for this qualitative case study. These findings are divided according to a number of themes which relate to students' experiences within the Aiming High case. The four themes academic, social, personal benefits, as well as the negative implications arising from programme participation will each be reported on individually in order to generate a comprehensive description of the case.

5.2. Presenting the Case Study Findings

In relation to presenting the findings to the reader, Merriam (2009, p.245) asserts that there is no standard format for reporting case study research, instead, the overall intent of the case study is the "shaping force" in determining the structure of the written narrative. Stake (1995, p.122) also concedes that there is no prescribed template to present case study research; however, he provides assistance by suggesting that a study's findings "...can be organized any way that contributes to the reader's understanding of the case", with this often being done through a "description one by one of several major components of the case".

In terms of the narrative, Stake (1995, p.134) also outlines an approach which one can adopt in the writing up of findings;

"We use ordinary language and narratives to describe the case. We seek to portray the case comprehensively, using ample but non-technical description and narrative...Our observations cannot help but be interpretive, and our descriptive report is laced with and followed by interpretation. We offer opportunity for readers to make their own interpretations of the case, but we offer ours too."

This chapter aims to lay out the findings according to recommendations made by Stake (1995) and Patton (1990) who suggest presenting case study research according to a number of themes. From the analysis, four themes have been identified; academic, social, personal and negative (see Appendix E). These themes are weighted somewhat differently according to the meaning attributed by the students. The academic aspects arising from programme participation of the programme seemed to have the most impact on the participating students, with the social and personal benefits being equally weighed next, followed by a small number of negative findings. It may be somewhat unsurprising that the academic benefits of the programme weigh more heavily than the social or personal benefits seeing that it is an academic programme in which many of the objectives of the programme are focused on the academic development of the participating students. The academic aspects of the programme often seemed to dominate the student responses within the interviews, and the students spoke at length about various aspects of their academic experiences within CTYI. The social and the personal outcomes of programme participation also contribute significantly to student experiences within the programme and thus needed to be included when presenting the case.

The perspectives of the various stakeholder groups (i.e. parents and guidance counsellors) are distributed throughout each of the themes. This data offers an interesting and worthwhile perspective of the *student programme experience* which may not have been known otherwise from solely studying the views of the students.

5.3. Academic Experience

There were a number of different aspects to the academic experience of students while on the Aiming High programme. Firstly, the courses provided students with an academically challenging learning experience outside of the classroom often in a subject area which is not be covered within the traditional school context. Secondly, the programmes give students the opportunity to preview college life and create an important link to the higher education environment for a group of students who come from communities which are typically under-represented at university. Finally, the courses also seem to have a perceived positive effect on student’s academic experiences upon their return to school.

Figure 5.1 provides an illustration of these sub-themes. Each of these themes will now be discussed in detail.

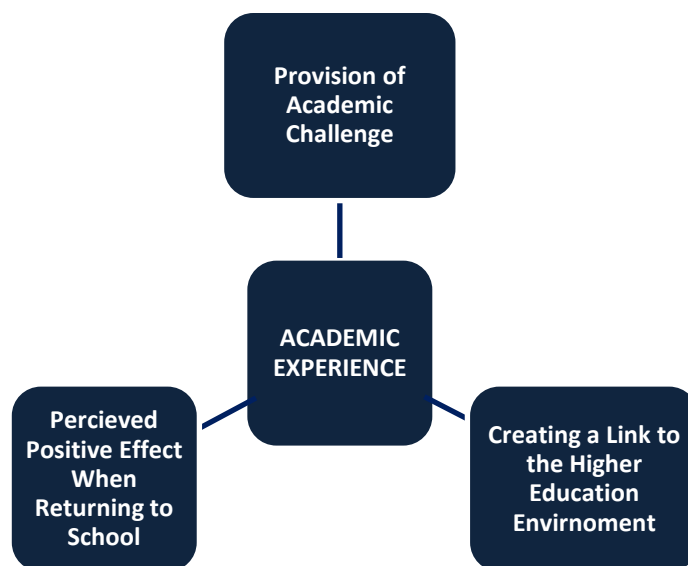


Figure 5.1 Overview of the academic experiences of students within Aiming High

5.3.1. Provision of Academic Challenge Outside of the School Classroom

One of the central features of CTYI's programmes is to provide students with educational academic experiences with other high-ability students outside of the traditional classroom. To achieve this aim, the Centre offers academically challenging and rigorous courses to students who have been identified through the Centre's Talent Search. In many of the summer courses, students study standard school content at an accelerated pace, while in others, they learn material not usually available to students their age. All of the courses across the three programmes are fast-paced and challenging. As stated previously, there are a range of subjects offered ranging from Journalism to Game Theory, and from Engineering to Cutting Edge Science (see Appendix H for more information on subjects offered). From the student responses, the desire to experience a subject area in may not be covered in school in great detail was participating appealing for the participating students:

"It's good because you get to study things that you wouldn't in school, like Psychology, Criminology, Computer Gaming, and Cutting Edge Science, you wouldn't be able to study them in school because there are only the basic subjects." (Current Student, 22(H), CTYI, Criminology, 2014)

You learn things that you wouldn't learn in school which is a good thing. Well, I am really into writing myself so it was the thing that I was most interested in for my first year. The second year, I went for Social Psychology as it looked interesting. Whereas this year, when I saw Architecture, I took it as a chance on it to see if it was something that I wanted to do in the future (Current Student, 75(S), CTYI Architecture, 2014).

For many of the students, there was an appreciation of the depth and specificity of the course material, especially when compared to subjects that are being offered currently at second-level.

By taking part in the courses at CTYI, they were able to learn about a subject in-depth than was previously possible within the school context:

“Before coming in, I didn’t know as much about marketing, there are only one or two chapters in the (school) book and I got a more in-depth view during the course so yeah, it kind of taught me more about it. I really know what it’s like now.” (Current Student, 90(W) SS, Business, 2012)

“(I enjoy) knowing about how your body works more in depth than what the Junior Cert teaches you. Like what we were learning about the liver and the digestive system, our Science books give you a bare idea. You just skew across it. You’re learning stuff about the heart that’s not even in any Leaving Cert books.” (Current Student, 70(W), CAT, Medicine, 2013)

“I studied Philosophy, and it has stretched my mind. That’s a weird phrase but it stretched my mind in a way that nothing else has, because it is really interesting.” (Current Student, 45(M), CTYI Philosophy, 2011)

The courses also give students the chance to be in a challenging academic environment with other students of similar ability. When the students were questioned, they would explain that they enjoyed been in a learning environment with “similar-minded people”;

“From taking part in this, I have realised that there is a large group of similar minded people out there...” (Current Student, 82(W), CTYI Medicine, 2011)

The parents and the guidance counsellors were able to add further light on the academic benefits of which being around students of similar abilities had on the students on their children.

Many of the parents felt it was at times “tough” for their children to be in the classroom in their schools as they often felt unchallenged:

“I think like in school, because the teacher knows that she knows the answer, it’s like ‘does anyone apart from (*the student’s name*) know the answer’, and it makes it very hard for her.” (Parent, 120(H), 2014)

“Because I know my daughter, is smart but in school, she gets comments like, ‘you got it right again, you got it right’, so she nearly, not dumbs it down but she just wouldn’t show how bright she can be...to be in a group here, with other kids that are of the same standard is great so they are able to be themselves”. (Parent, 124(M), 2014)

“I remember this day last year, the orientation, they had to get into order of their date of birth, it was just an icebreaker to get to know each other, but in the course of that, he actually discovered that there was only one that was younger than him, and there was a fella that was nearly eighteen. I think he felt ok, I may be on the small end but some of these are grown men and to be in a classroom holding his own for two weeks with people that were Leaving Cert level. That was a huge boost.” (Parent, 131(S), 2014)

All of the guidance counsellors interviewed (H, R & S) expressed the courses provided students a beneficial and unique learning experience to learn with other talented students which could not be offered to the same extent in the respective schools:

“They may not be challenged in school enough at all times, so it may challenge them outside the classroom environment with people on the same level as them.” (GC (S), 2013)

5.3.2. An Early Opportunity to Preview University Life

Aiming High gives students from families who often have little or no experience of the higher education system the chance to preview university life and to understand what university life entails. Furthermore, the Aiming High initiative further strengthens the link between the participating DEIS schools and the university environment.

As stated previously, students from DEIS schools are less likely than their middle-class peers to attend university (McCoy et al., 2014). Yet, from the sample of current students questioned throughout the study, it seemed that higher education is something which they hoped to do upon completion of their school studies. From the current student perspective, the majority of students spoke about studying a subject at CTYI so that they could understand what it would be like to study it in university as the below quotes highlight;

“When I am older, I want to be involved in politics so I thought this would give me a feeling what it would be like to study it in college.” (Current Student, 14(H) SS, Law and Government, 2012)

“It’s good because here (at CTYI), you are able to get an insight into the different academic fields and what’s involved if you want to study them at college.” (Current Student, 82W, 2011)

“If you didn’t go to CTYI, then you will just be stuck with the normal school subjects and you wouldn’t get to experience things like Criminology and Social Psychology because you wouldn’t learn them in school. Like you would have to go to college to pursue them but you wouldn’t know much about them. But I think the three week courses that you do here, give you all the information that you need to find your own path, and like when you have friends doing different courses, they tell you about it, and if you find it interesting, you can try that the next year...” (Current Student, 72(S) CTYI, Criminology, 2014)

One of the most interesting experiences which emerged from the data collection came from one student. When questioned reflecting back on his summer 2011 experience studying Medicine in CTYI, he explained;

“I have become more motivated towards becoming a doctor; I now know I want to work with people, practicing medicine.” (Current Student, 82(W), CTYI, Medicine, 2011)

From follow-up research which was carried out in autumn 2013, it is evident that the student had fulfilled the aspirations which he set for himself after the summer programme at CTYI (summer 2011). He is now in a third-level institution studying Medicine. When he reflected back on his experience as a *previous student* a number of years later (in 2013), he cited the opportunity which CTYI provided to him as important in solidifying his undergraduate course choice;

“I had thought I would like to study Medicine but it was the courses I studied in my first year that made my mind for definite. The enthusiasm of my course instructor as well as the fascinating nature of the medical field and profession showed me that Medicine was the career for me.” (Previous Student, 82(W) CTYI, Medicine)

Interestingly, for others, experiencing what a course or a profession really entails could lead students to re-think previously made decisions as to future career and course decisions:

“I realised being a vet would be a lot of work and I found out that I don’t really have a strong stomach!” (Current Student, 77(T) CTYI, Veterinary Science, 2011)

“I thought I might like to do something in computing but I realised I don’t like it at all. I will never look at a game in the same way again. I never knew about all the coding behind it. It’s like doing Maths backwards, it’s horrible.” (Current Student, 4(D) SS, Computers and Technology, 2014)

From the Guidance Counsellors' Perspective

Within the school context, the guidance counsellors felt that CTYI played an important part in giving students the chance to ascertain 'a flavour of college life'. This opportunity was considered crucial as many students would come from homes where there would often be no history of higher education;

“...A lot of our students most of them, wouldn't automatically think of third level so we are trying to work with them around their futures and education being the way forward and qualifications, and some of course would come from a culture of no-work. We are trying to change that. Whereas in other schools [non-DEIS], they would be climbing up the walls to get to you, it [going to university] wouldn't even be an issue.” (GC (H), 2013)

From the Parents' Perspectives

While none of the parents interviewed had attending university themselves, they viewed higher education as highly important, and something that they wished their children would pursue;

“We always put a focus on that there's primary, there's secondary and then later on in secondary you specialise your subjects and then you go onto college to learn what you are going to work at, that's the way we always explained it, because neither him or me went to college...like you have a lot more opportunities if you have a degree.” (Parent, 126(S), 2013)

Many of the parents felt that university education was something very foreign to them, and something that would not have been possible, or considered for them after leaving school.

They felt that by their children being exposed to such a learning opportunity, it gave them a new insight into this learning environment;

“It lets her dip her toe into third level education. Like my family or my husband’s family, none of us went further (than school), so we haven’t a clue about what’s out there, so she has had to find it out for herself...Like some of her friends from this (CTYI) have moved onto college so they would be able to tell her what to do and how to do it, and what colleges to go to. Seemingly, schools are great now about telling you about colleges and what open days are on, but I know when I went to school we weren’t encouraged...It was like a foreign world... We were made leave school, and get a job to help pay the bills. I think the children nowadays are taught to dream, and dream big, and I think the schools are very good in that... (Student’s name) has friends that have gone to college, and they are going to lead the way for her”. (Parent, 122(I), 2014)

“...it (CTYI) gives them an idea of if he did want to go onto third level, what options are there and he’ll be used to it. He has an idea about how things run, what to do, where to go, that kind of thing. It gives them an idea about what college life is like.” (Parent, 119(F), 2014)

I came to realise throughout the later stages of data collection that perhaps it wasn’t the programme or the university environment which could unconsciously influence a student’s decision to attend third-level;

“Above all, I do not think it is the decision to go onto higher education which is the issue or an outcome of participation on the programme, more so, I think it confirms in student’s heads that they are capable of doing it and succeeding. I feel it gives them the confidence to *go for it*. As one guidance counsellor said, the courses “plant the seed”; not necessarily giving them the idea of third-level (that may be done in the school or at home) but it plants the seed that they are capable. It gives them a sense of familiarity, and crucially, a level of confidence in their ability which cannot be underestimated. It is essentially a bigger jump for these (Access) students than non-Access (who assume it is a given), and to an

extent, yes, they may want to, they may be more than capable but the forces of the environment and *behind the scenes* often prevent it. Even if it is for a short time, by being immersed in a situation that resembles third-level studies with advanced coursework, and a diverse group of students in an independent learning environment, it can give students the confidence to believe that they can go further and that they can go all the whole way.” (Researcher’s diary, Year 2)

As one of the students in the 2011 phase of data collection stated, “...it made me more positive that I can tackle it and eventually move onto higher education.” (Current Student, 91(X), CTYI, Japanese, 2011)

While sweeping generalisations cannot be made as to the instrumental role of these programmes in impacting decisions and perceptions about higher education for every student, from the sample of students studied, the courses were considered greatly beneficial in giving the students an experience of university life.

5.3.3. Returning to School

One of the sub-research questions of this study aims to understand if the experience which students have while in CTYI has any implications for them when they return to school. Yet before such feedback can be presented, it is important to consider students’ opinions of school.

All of the students (new and returning current students) were asked about their opinions of school in the questionnaires and the interviews. For the most part, the students liked school, and had positive comments to make about their school experiences. In particular, students liked learning new things, being around friends, their engaging teachers, and the challenge of certain school subjects. Conversely, a number of students disliked elements of their school experience; for instance, spending excessive time on material that they already understood, the routine of learning material off, certain subjects, being bored in

class, not being challenged enough, not having “*mentally stimulating*” classes and “*being around people that they didn’t like*”.

Their time in CTYI seemed to give some students reflective time about their school environment and what school offers them. Overall, the students seemed to prefer the learning environment which CTYI offers;

“School is alright, but the environment here is way better. There are similar minded people here, and the courses are very interesting as well. You can choose to study what you are interested in, and the instructors are nice so that helps.”
(Current Student, 69(S), CAT, Medicine, 2013)

“I get to learn stuff we normally don’t get to in school...It’s a different experience than I’ve ever had before and it’s different to normal education in school.”
(Current Student, 99(Y), CAT Medicine, 2014)

There was a mixed consensus amongst students in relation to telling their peers in school about taking part in the summer programmes at CTYI. The majority responded that they did speak about their time in CTYI when they returned to school, with the remaining minority explaining that they would prefer to keep their time at CTYI to themselves. For the students who did speak about their experience within the school setting, they openly described their experience to their peers:

“I said it was one of the most worthwhile things that I had ever done. I told them (his classmates) that it had helped me grow as a person and that it boosted my self-confidence.” (Previous Student, 138(W), CTYI, Medicine)

“I told everyone I learned really cool things. The classes were interesting, the social aspect was amazing and all the staff were really friendly.” (Previous Student, 136(N), CAT, Social Psychology)

“I told teachers, friends and classmates! Most of my classmates regretted being not smart enough to apply. Teachers decided to recommend it to all of their future students.” (Previous Student, 134(K), SS, Science & Health)

“I told people in my class and school. Some people that I told came to CTYI this summer. I gave good feedback and told them that they would enjoy it.” (Current Student, 30(J), SS, Medical Science, 2014)

For the others, who did not disclose their participation in the programme, they kept this intentionally hidden as they believed it would make *life easier* with other students not knowing. One parent spoke about her child who had suffered bullying in the past, and as a result, her son wished to keep participation in CTYI *secret* amongst his classmates for fear of more negative commentary;

“You live and learn and he is intentionally not telling them. No one knows he is doing this, but he’s still very excited. You live and learn to keep your mouth shut.” (Parent, 126(S), 2013)

For some students, there were negative perceptions amongst their friends in school about CTYI;

“My friends don’t really like school and my friends would think of it as summer school.” (Current Student, 29(J) SS, General Science, 2014)

“...I was one of the first in my school to go but now each year new girls go from my school. Some friends don’t care and think it’s stupid but I just say they’re missing out.” (Current Student, 20(H), SS, Psychology, 2014)

On returning to school, some students had to explain what the programme involved. By doing so, they felt they were able to change some perceptions about the programmes and CTYI;

“At first my friends thought I was stupid and had to go to summer school...My English teacher asked me how it was when I came back and I told them that I loved it. And they all wanted to do it then.” (Current Student, 80(T), CAT, Criminology, 2012)

“I told my friends and classmates all about the course I had done and they found it really interesting. One of them was really angry because he didn’t do it and because my guidance counsellor never offered him to do it.” (Current Student, 65(R) SS, Psychology, 2014)

For the *previous students* and *current-returning-student* cohorts, I was able to ascertain how their experience in CTYI impacted them when they returned to school. For the students who studied subjects included in the school curriculum, they often felt that they had a *head start* with some of the coursework when they were back in school;

“Last year when I went back to school, I kind of knew parts before we had even started, like we hadn’t done ‘assessing a business’ and I had done part of that from the camp last year. And say from this year, it will help me for transition year because you have to run your own mini-company so I have kind of gotten a bit of an insight into that because we got to do our own business plans here....” (Current Student, 90(W) SS, Business, 2012)

Some students chose to share their newly acquired knowledge and resources in the subject area with their classmates when they returned to school;

“I talked about it with my biology teacher and told her about what chapters I learned in Biology. I shared sheets of information with my class.” (Previous Student, 134(K), SS, Science and Health)

Others felt that generally the experience was beneficial giving them more focus when they returned to their school studies;

“I had a more mature and focused outlook on the Leaving Certificate.” (Previous Student, 134(K), SS, Science and Health)

A finding which was present throughout the vast majority of interviews and questionnaires was how students perceived learning at CTYI and school to be different. They are not supposed to be the same, and indeed one is not supposed *to be better* than the other. However, a recurring finding in the data is the idea that in some way, the environments were almost competing. In many ways, students see it as ‘*school versus CTYI*’. Students spoke about the different and separate learning environments which school and CTYI offer, yet unsurprisingly, they also compared them, with all the students preferring the learning and social environment of CTYI;

“If I don’t attend school, my mother doesn’t allow me to go to CTYI, so I go to school.” (Current Student, 43(M), CTYI, Behavioural Psychology, 2011)

“It is way better than school.” (Current Student, 69(S), CAT, Engineering, 2012)

The students seem to enjoy the challenging elements of the courses, with a number of them citing it as “more challenging” than in school. One of the students in particular felt that it gave her a more constructive outlook about school and schoolwork;

“I think you’re more positive towards school, like working hard. I suppose now I can see the fun side of it too. If you go into looking positively at it, you can get your work done and you can still have fun with your friends. Like that’s what they do here. Like you can do work and then go off with your friends and have a laugh.” (Current Student, 80(T), CAT, Criminology, 2012)

On the whole, while a number of students said that they preferred the environment of CTYI, the vast majority appreciated the extra opportunity which CTYI presented, in supplementing their mainstream schooling.

5.4. Social Experience

The social component is a very important aspect of the summer programmes at CTYI. The programmes provide students with the opportunity to make friends, to reunite with old acquaintances and to mix with intellectual peers. As one of the students correctly pointed out, *“we are specifically told that it also a place to socialise”*.

Most of the students who enter CTYI’s older student programmes under the Aiming High initiative attend on their own. While there may be a number of other students taking part from their respective schools, or from their particular year group, it is very much an independent learning experience. Nonetheless, each of the students expressed a desire to make new friends on the programme. In many cases, this was a significant and attractive feature for taking part in the first place. The design of the student timetable (Table 4.6) facilitates this social interaction. The activities after class hours and the social time enable this development so that students are able to socialise, and engage with each other at regular intervals (See Appendix I for a sample of student recreational activities). Indeed, the individual classes themselves aim to facilitate social development through group activities, class discussions and debates.

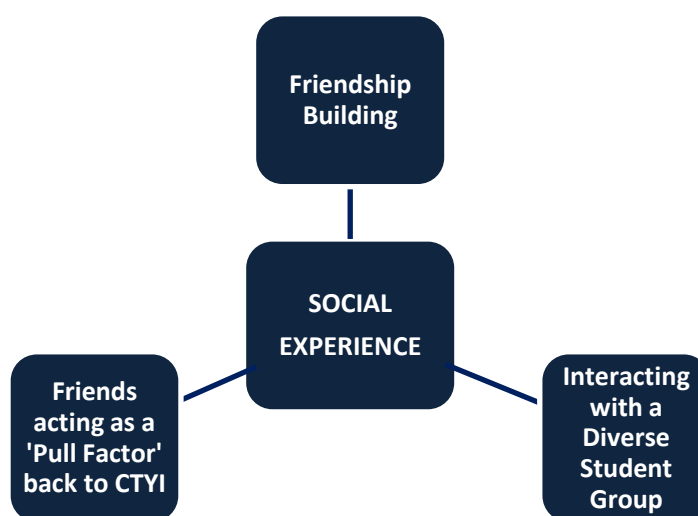


Figure 5.2 Overview of the social experiences of students within Aiming High

5.4.1. Friendship Building

The key finding in relation to the social aspects of the programme is that the courses give students the opportunity to make new friends. The forming of friendships throughout the programme in turn resulted in a positive programme experience for the participating students. The inclusion of activities within the students' daily timetable facilitated the creation of social bonds amongst the students:

“The afternoon activities were really fun. I found everyone friendly and that everyone got on together. It's a really accepting environment.” (Previous Student, 136 (N), CAT, 2012)

“...(I was scared) at just the beginning when I was like new when I was like on my own, but I made a friend on the second day during the activities, so we stuck together and then we were together all the time so I wasn't so nervous or shy anymore.” (Current Student, 15(H), SS, Humanities, 2013)

Many of the students felt that their experience at CTYI was enriched through meeting people and making friends with others who shared the same interests. The sharing of interests was looked upon favourably amongst the students:

“You get to meet people like you with common interests, and for some that opportunity is often impossible.” (Current Student, 35(K), CTYI, Behavioural Psychology, 2014)

“The great benefit also about doing this programme is that you get to make new friends who have similar interests as you.” (Current Student, 19(H), SS, General Science, 2014)

It was also interesting that a number of the *previous students* also made reference to how they were still in contact with some of the friends which they made on the programme even after a number of years since taking part in CTYI.

The parents also provided insightful feedback into how the social elements of the programme contributed to a positive experience for their children which was sustained after the programme's completion:

"He is still in contact with some of them on Facebook... he knows what courses everyone else is doing, yeah they're all still in touch. Yeah, like his class photo from last year where they all have the jumpers and the teacher is in it, that's still is up on his profile." (Parent, 131(S), 2014)

"He's kept in touch with people since he's come on the course. There's one chap now that he's doing the same course again as him now from Bray and he stayed out in his house for the weekend and he has come to our house so he has made friends. So not only did he get a bit of education but he's made friends as well you know?" (Parent, 119(F), 2014)

5.4.2. Diverse Group of Students

One of the unique features of CTYI's programmes is the diverse group of students which the programme attracts. Within the older student programmes, there are a range of socio-economic backgrounds represented, with the students coming from all corners of the country. In more recent years, CTYI is attracting a growing international student contingent. This gives the students within the Aiming High initiative the opportunity to mix and socialise with a varied and diverse group of students which can be considered beneficial in attaining different viewpoints and perspectives;

"There are people from all over the world and people from all different counties of Ireland. It's such a small community of people here but there is such a wide aspect (to who is on the programme), because there are people from all over the world and different cultures all coming together and it makes it really interesting to talk to people and what they're doing and where they're from." (Current Student, 76(S), CTYI Criminology, 2014)

From the guidance counsellor's perspective, the exposure to a diverse group of students can be considered positively as it exposes students to an environment outside the homogenous environments which they are used to, i.e. in which they live, and attend school and may have a positive experience on students after the programme finishes;

"They get to interact with other students, because you find sometimes here in (*area of North Dublin*) that people don't tend to move very far. I think they understand that, 'I could go to third level, because I'm as good as everyone else if I get here'. Being exposed even to other students who are obviously cleverer and bright and motivated and all of that has a huge impact." (GC (H), 2013)

"It gives them the opportunity to meet peers with the same wavelength; it just integrates them better into the mainstream education setting." (GC (R), 2013)

5.4.3. Friends as a 'Pull Factor' For Returning To CTYI

Once enrolled onto Aiming High, the students have the opportunity to return to CTYI. One of the key pull-factors for many of the students returning to the summer programme is the benefit of being able to re-unite with friends made in the previous summer.

For the *new-current students*, when asked why they would like to come back to CTYI, many of the students said they would like to come back so that they could see their new friends again. Similarly, for the *returning-current students*, seeing their friends again (made in years previous) was a major reason why they wanted to return. A number of the students when interviewed mentioned discussing coming back with friends before sending in their course application.

Many of the students and parents discussed how there would be a discussion relating to course preferences before the application was sent back to CTYI;

“Yes, there would have been a discussion over Facebook about what he put in (with his friends), and what order he put them in.” (Parent, 131(S), Focus Group, 2014)

5.5. Personal Experience

The students also benefitted personally from their CTYI experience in three key ways. First, there was a perceived increase in confidence on students as a result of taking part. Second, there were a number of areas which benefitted students in terms of the approach and opinions about learning. Finally, there were also a number of positive implications for students being chosen for such an opportunity.

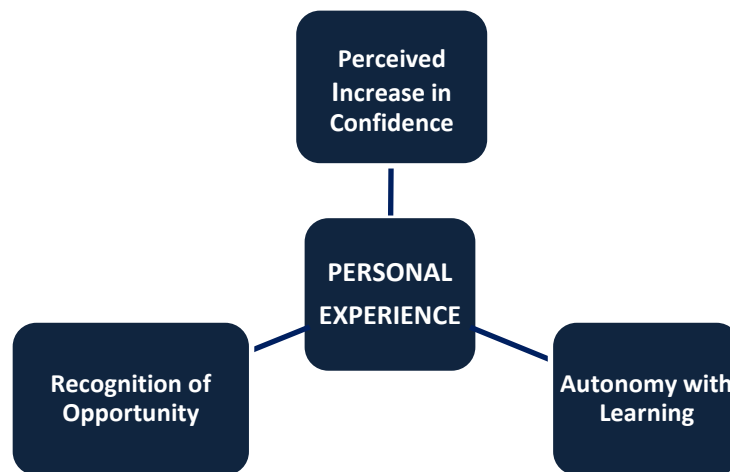


Figure 5.3 Overview of the personal experiences of students within Aiming High

5.5.1. Perceived Increase in Confidence

The perceived increase in confidence of students was one of the most explicitly mentioned findings throughout the entire data collection phase of the research, in particular from the perspective of the parents and the guidance counsellors.

From The Students' Perspectives

From the students' point of views, their experience at CTYI brought about a positive change in their self-confidence in social situations, while also developing a feeling of comfort in their own academic ability. The findings for this category were most apparent for the returning-current student group, where they had the experience of returning to school after the programme completion:

“It was amazing because it gave my self-confidence a boost.” (Current Student, 65(R), SS, Psychology, 2014)

“I told them [school authorities] that it was a great experience and recommended it to people [school friends] because it gave me a [very welcome] confidence boost.” (Current Student, 20(H), SS Psychology, 2014, final bracket added by participant)

From The Parents' Perspectives

The parents spoke more explicitly than the student group about the confidence boost which the programmes seemingly gave their children;

“I think (it gives them) things that you can't teach....confidence. They become more self-assured. She was very shy and she wouldn't say boo to a goose, and now I couldn't tell her what's what, she knows it all now.” (Parent, 118(E), 2014)

“She didn’t talk to anybody (in school). She just felt she was there, and they were over there (other peers in school). And now, she could take on anybody. The confidence boost has been unbelievable.” (Parent, 120(H), 2014)

“I think it builds their confidence a lot more, in that, its ok to be academic, it’s ok to be brainy, like to be in that little circle of people and to learn from each other without being, as you said, laughed at because you got something wrong.” (Parent, 127(S), 2014)

The parents also felt that having someone else highlight their child’s academic gifts and talents was invaluable;

“...Myself and my wife have always tried to tell (*name of student*) you know, you’re a clever lad but you know, to hear it from somebody else. It is one thing hearing it from mammy and daddy (agreement from group) but to hear it from, and for somebody else to turn around (and say)... you have taken this test, and you are clever. I think that is a huge boost to them. It does give them or help to give them that feeling that I can do anything and that I can be anything that I want to be.” (Parent, 128(S), 2014)

From The Guidance Counsellors’ Perspectives

All of the guidance counsellors interviewed unanimously agreed that the most noticeable outcome for students taking part in the programmes was the perceived increase in confidence which they believe the programmes instilled in the students. Specifically, one of the guidance counsellors felt that providing students with the chance to undertake a positive learning opportunity which recognised their talents was extremely beneficial, as at times, in school, such talent would be overlooked when the attention was given to the trouble-makers;

“The main thing that stands out to me is increase in their confidence, because they have been recognised for their abilities in school and that it is ok to be talented.” (GC(S), 2013)

“(I think)...greater confidence and self-awareness of their talent. It’s good as well to see the focus on students that usually don’t get as much recognition, the ones who are top of their class. Usually it seems as if the misbehaving students are the ones most likely to have the attention on them.” (GC (S), 2013)

The Awards Ceremony

The Awards Ceremony also struck a chord with the parents for the recognition it gives to students for their academic abilities. The speeches from the special guest speakers which marked the achievement of the students in the Talent Search fostered support of CTYI amongst the parents;

“I can remember that we were at the awards ceremony and I remember the one the speakers saying in their speech, that there are awards for musicians, and for sports people, but academics don’t get anything and it should. That really hit home to (*name of student*), because you know it’s alright to be just an academic. I would say to him like you don’t struggle at Maths or English like other kids would. He would say, I just want to be good at something and he couldn’t see...Whereas this has, (CTYI), and that’s what he loves, that he is here with people that are like him”. (Parent, 131(S), 2014)

After the awards ceremony, the parents reflected on the potential opportunity which the courses give to students. One of the parents in particular noted how she would have loved the chance to take part if she had been given the opportunity in school;

“I would have loved to do this when I was in secondary school if I was able to, like as they said it there (in the awards ceremony), it could have sent you on a completely different path. Like you probably wouldn’t have known your own ability to what you can do. Yeah, this is just a great opportunity for them.” (Parent, 124(M), 2014)

5.5.2. Autonomy with Learning

As the courses aim to resemble university style courses, there is a large amount of independent work involved for students to complete. A number of the students spoke about the independent learning environment as being a positive outcome of their experience. This autonomy in the learning process is something that they felt was different to their learning experience in school, and something which would be beneficial to them should they proceed onto university;

“...I think the university environment is very good for learning. Like the whole idea is that you are independent, and that’s it’s up to you to do it, so it puts a lot of emphasis on you, you know? Like in school, it’s the teachers’ job to drill... (it into your head), well that’s the bit I am looking forward to (when I go to college).”
(Current student, 71(S), CAT, Medicine, 2013)

The coursework which the students have to complete on the programmes as part of the module also contributed to sense of responsibility and independence over their work;

“I like the way you get projects to do, the independent work as well and taking notes. This year we had to do the marketing project for Rolls Royce and we had to come up about how we would advertise it so basically it’s like you are putting yourself in the position of a person who works for the company and then you are using your own point of view. Yeah, I liked that.” (Current Student, 90(W), SS, Business, 2012)

Furthermore, being in a different educational setting provided a certain amount of freedom which was considered favourable. This different learning environment gave students a seemingly added sense of maturity over their work:

“I liked the freedom of being in the CTYI classes as they felt like they were a college class.” (Previous Student, 134(K), SS, Science & Health)

“You get to experience what college life is like and what it’s like to study and what subjects you are interested in, in an environment where everybody wants to learn.” (Current Student, 97(Y), SS, General Science, 2014)

“The stuff you learn here creates a base for your life. The experience here I guess has really shaped me as the person I am today and I would like to think a better me. I’ve learned so many things here. The classes are good because I didn’t have any direction in life and I hadn’t a clue about me really but this place has given me subtle clues.” (Current Student, 21(H), SS, Psychology, 2014)

5.5.3. Recognition of Opportunity

Each year, only a handful of students are handpicked to take part in the Talent Search with CTYI. The students realise that this is a special opportunity to have their academic talents recognised by their schools, and by CTYI;

“This is my third year coming...and next year will be my last year. Like I mean coming up to the time you might have mixed feelings about it, but I will come back. It’s a once-a-year opportunity, and it’s a rare opportunity, and there are so many advantages to it so it’s not something that I would want to miss.” (Current Student, 75(S), CTYI, Architecture, 2014)

For one of the students, who thought it was a ‘once-off’ opportunity, he was delighted when he found out that he could return to CTYI as part of the scholarship programme. Once it was made clear to the student that he was able to participate for another summer, he was excited about the prospect of coming back;

“He (her son) thought it was just a once off, and I thought that, it will be someone else’s turn for (*name of school*) to put someone else forward from first year. So for it to have a second year, it’s such a bonus.” (Parent, 131 (S), 2014)

Career Development- "Something for the CV"

For many of older students in the programme, their CTYI experience was something that contributed to their personal development and 'something for the CV';

"It looks good on my CV, even in job interviews and course interviews I've been constantly asked about my time here." (Current Student, 21(H), SS, Psychology, 2014)

For the previous students, a large majority of the respondents reported that they had listed participation in the CTYI programme on their CV. One of the guidance counsellors stated that they would phrase participation in CTYI as something that would be good on their CV's and something that they could talk about when applying for jobs when they were outlining the benefits of taking part in the courses to students.

Returning To CTYI

Once accepted into CTYI, students have the opportunity to return each year and avail of the subsidised fee. As a result, students have the option to participate in the programme until school-leaving age.

At the end of each questionnaire and interview, students were asked whether they would like to return to CTYI next summer. While a small number of eligible students said they would not return to CTYI, due to possibility of other plans for the subsequent summer, or being too old, the majority of students' responded saying that they would like to come back.

When probed about their responses, students expressed a desire to study another course, to see friends again or to make more new friends;

“This is a lot of fun and I really enjoyed learning in this environment. It made me look forward to college life, and I would like to come back (to CTYI) and see my friends.” (Current Student, 97(Y), SS, General Science, 2014)

“Why wouldn’t I want to come back? It’s the three best weeks of the year! It offers the opportunity to study something you wouldn’t do in school and to meet some amazing and extraordinary people.” (Current Student, 42(K), CTYI Architecture, 2014)

Perhaps the best testament in deciding how students consider CTYI is to look at the numbers of returning students. Every year, the number is growing with more and more students coming back every summer. The overwhelmingly positive feedback from the students regarding their experiences on the programme makes this no great surprise.

5.6. Negative Implications of Programme Participation

Is anything perfect? In this case, it's not. The negative aspects of programme participation can be divided into two major themes; stigma associated with CTYI and the programme duration.



Figure 5.4 Overview of the negative aspects of the Aiming High experience

5.6.1. Stigma of CTYI

During the interviews, a number of students expressed the presence of a “stigma” attached with coming to CTYI, or as one student called it, “nerd camp”;

“Yeah like in my school...there is a stigma attached. It’s probably a well-known stigma, like coming to a place to learn over the summer, but you notice those people who take part in the courses (in school) and you will talk to them and you would mention it to them but you would keep it on the low because of that stigma.” (Current Student, 75(S), CTYI Architecture, 2014)

“I think a negative would be, nothing in here but outside, when you’re like I was in CTYI, and they’re like, uh what’s that, and you’re explaining it. They kind of call it ‘the nerd camp’, and they kind of see it as a negative and then being slagged about it in school.” (Current Student, 22(H), CTYI, Criminology, 2014)

For these students quoted above, through my own research and through asking further questions the students in the interviews, their schools do not openly acknowledge or discuss their students who participate in the CTYI programmes.

There was mixed feelings about telling friends about taking part in CTYI. For the most part, students told their close circle of friends, so “people would know, but I wouldn’t broadcast it”. A small number of students reported only telling their families;

“I’m on the missing list in (*area of North Dublin*), they don’t know where I am. Next, they’ll be sending out a search party”. (Current Student, 4(D), SS, Computers & Technology, 2014)

“My neighbour asked my mam if I was still living with her, because I leave so early in the morning and come back at so late at night. They think I’m gone. Like (I would only tell) my close friends, you wouldn’t go bragging about it”. (Current Student, 21(H), Psychology, 2014)

In some schools, student’s attendance at CTYI was highlighted in their school. While the students didn’t mind about this, they felt it is not something that they would draw attention to afterwards with their peers as one parent explains;

“They know about it (other boys in his year). Because it was in the school’s newsletter, his name, his picture...But he’s not the type of person to go around to be like, I’m doing this and I’m doing that, but if it’s mentioned, it’s ok. But he won’t brag about it. He won’t advertise about it but if it is brought up he will say what he did or whatever”. (Parent, 119(F), 2014)

Upon analysis, this “stigma” as the students referred to it, seems to be related to the attitude of CTYI in the participating schools. For instance, in the schools which did not openly promote the programme, there was more of a negative perception with regard to programme participation.

A number of the students interviewed from this school spoke about some of their peers viewing participation in CTYI negatively. When I interviewed the guidance counsellor (S), he admitted that the opportunities which CTYI provide to students are not openly discussed around the school. It was not the case that the guidance counsellor (S) did not support the programme as the other feedback he gave was overwhelmingly positive in relation to the benefits of the programme. The issue seemed to be linked to constraints with respect to the small number of places which are allocated to the school each year;

“I wouldn’t want them broadcasting it around the school...because then I would have a load of first years saying why can’t I do it? So it is not something I would publicise...” (GC, (S), 2013)

The action of not publicising the programme became a method used by the guidance counsellor in order to avoid turning down students who would put themselves forward for the opportunity. As a result, the guidance counsellor would carefully identify students for assessment and consult with those students and their respective parents on a one-to-one basis.

In another school (R), the situation was quite strikingly different. In this instance, CTYI was openly talked about and praised with no negative feedback reported from any of the students. In this school, students often self-selected themselves to take part in the programme even before being approached by a senior staff member. When interviewing the school’s guidance counsellor, he had a completely different mind-set about sharing the information to students than the guidance counsellor from the previous example as the quote below demonstrates;

“We have become very open about it and blowing the trumpets about it, it has made it ok to talk about it; so the students are telling each other about it” (GC (R), 2013)

Yet, this guidance counsellor (R) expressed his concern with students putting themselves forward as such interest in the programme raises significant issues for the school in relation to the funding for the programme. In this school (R), the guidance counsellor had stated that the school and a number of voluntary organisations subsidise the course fees for the programme as even the reduced fee scheme is often too costly for many of the families. As a result, even though participation in the school is considered hugely favourable from the viewpoint of both the student and the school itself, such growth is also considered worrying in relation to the financial cost of the programmes. The guidance counsellor's concern rests with the fact that as the numbers participating in the programme grows, the school will have to "ask for something" from the parents and he feels that if this could cause some students not to participate given the financial cost.

5.6.2. Programme Duration

For many of the students who were on the CAT or Summer Scholars programme, there were negative comments made about the length of these courses (two weeks) in comparison, to the length of the three-week CTYI programme;

"Too short, way too short. Like, it should be three weeks. That was the quickest two weeks of my life. I'd do another two weeks if I could." (Current Student, 4(D), SS, Computers & Technology, 2014)

While a very small percentage from the Centre of Academic Talent (CAT) and Summer Scholars programmes said that they would like the programme to stay the same length, the vast majority expressed a desire for the programme length to be extended to three weeks.

A small number of students expressed some discontent for “not being able to see friends from home” while they were on the programme as they would not ‘sign out’ until the late evening (either at 8:30pm, or 10pm);

“It can be difficult to keep up with the long days and not seeing friends from home can be tough.” (Current Student, 75(S), CTYI, Architecture, 2014)

“You wouldn’t see friends for a couple of weeks and I mean that would be a disadvantage.” (Current Student, 75(S), CTYI, Architecture, 2014)

While given time to reflect, there was a realisation on the part of the students that they had the freedom to choose whether they come to CTYI in the first place, and that overall, the benefits of participation far outweigh any negative implications;

“I don’t think there are any negatives...if you don’t want to do it...you’re not made do it. You don’t have to go to here if you don’t want to...Because say you don’t know anyone, well you will get to know people, and they will become your friends. I don’t think there are any negatives that can’t be solved.” (Current Student, 72(S), CTYI, Criminology, 2014)

From The Parents’ Perspectives

The parents perceived the courses as being all-round beneficial for their children and a “great opportunity” during the summer:

“It keeps him off the streets... like it keeps him busy and he won’t be sitting around playing his (computer) game. So he is benefitting from coming here. He’s getting something. He’s not sitting in front of a computer screen all day you know? I don’t see any drawbacks at all.” (Parent, 119(F), 2014)

“That it finishes is the only thing (the negative) and that they have to go back to school after it. If they could do it for longer, they would. And if they could do it for the whole summer, they would.” (Parent, 129(S), 2014)

From The Guidance Counsellors' Perspectives

For the guidance counsellors, who often nominate the students for the assessment, they didn't see any drawbacks either for students taking part in the programmes;

"I couldn't say I do really. I suppose what we forget is that so many young people do things in the summer; programmes and camps. The fact that they are over in DCU learning and making that journey on their own and getting to see new things- the sciences and all the different areas that they do. I couldn't see any disadvantage. I really couldn't say anything." (GC (H), 2013)

"I can't see any drawbacks. It can only enhance their life experiences and opens up third-level to them; making it a reality rather than something they just hear about in school." (GC (B), 2012)

For one of the guidance counsellors, the cost of the programmes hinders some students taking part. Even though the course fees are heavily subsidised, even a minimal charge for the courses can restrict some families sending their child forward;

"I suppose if there was one drawback it would be, having to pay anything at all from the families." (GC (B), 2013)

5.7. Conclusion

This chapter presented the findings of the case study according a number of themes which were formed throughout the analysis process. These four themes; academic, social, personal and negative findings, were subsequently broken down further in order to provide more specific detail as to the experience which the programmes had on the lives of the participating students.

In terms of academic benefits, the courses at CTYI provided students with an academic challenge outside the classroom which they would be unlikely to otherwise have. There was a link to the higher education environment in giving students a realistic experience and preview of what university life entails. Finally, there were also a number of positive outcomes when students returned to school. The social aspects of the programmes generally related to positive feelings about making new friends, with these friends often influencing decisions about returning to CTYI. There were also positive feelings about being around a diverse group of students from different backgrounds which some of the students would not have come across before. The personal aspects relating to the student experience are also important elements within this case. The key personal outcome of the courses centred on how the courses were perceived to build students' confidence in relation to their academic abilities. The negative implications associated with participation were also considered. The negative findings related to the case were the comments students received or comments students believed they would receive if they disclosed to their peers that they were taking part in the programmes. Another negative finding related to some of the students feeling that the length of the CAT and Summer Scholars programme could be longer in line with the three-week CTYI programme.

Through each of these four themes, this chapter aimed to convey the perspectives of the study's participants groups in order to establish a detailed description of the students'

experiences within Aiming High. The following chapter, Chapter Six, will discuss these findings in light of the literature from the field and in terms the contextual elements of the programme which were explored in Chapter Four. The next chapter will also conclude the study.

Chapter 6- Discussion & Conclusions

6.1. Chapter Introduction

This chapter will discuss the findings from this study in light of the literature from the field and will conclude the study itself. This chapter is divided into a number of parts. The first section intends to revisit the research questions which were put forward in the initial stages of this thesis. This will include outlining the various benefits which the courses provide to the participating students as well as outlining the negative features of the case. This will lead into a discussion in relation to the various contextual and design elements of the programme which are important to revisit as they also contribute to students' experiences within the programme. The significance and implications of the research will then be established before a number of recommendations are outlined. The final section of the chapter will state the limitations of the study and the potential areas for further research.

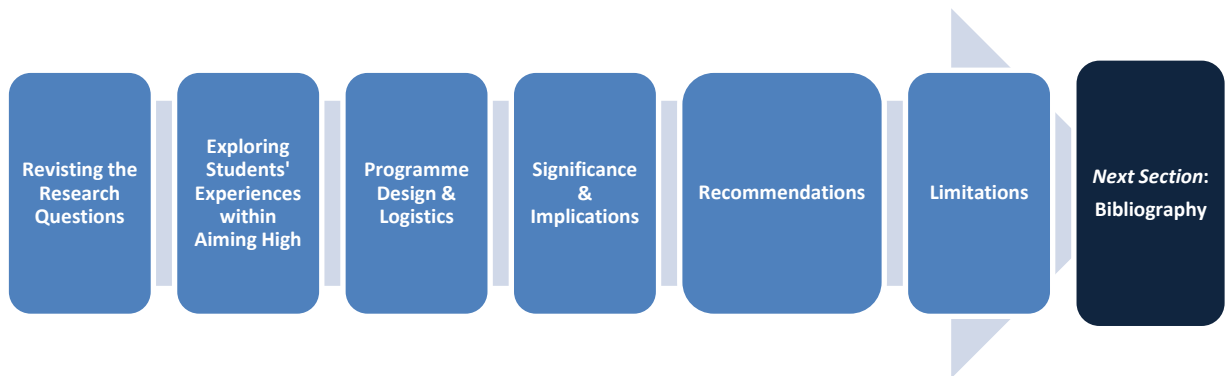


Figure 6.1 Structure of Discussion and Conclusion Chapter

6.2. Revisiting the Research Questions

It is important to reiterate at this point that this study employs a case study methodology which draws heavily on the work of Merriam (1988, 1998, 2009). According to Merriam (1998), 'descriptive case studies' are best suited to innovative programmes and practices, and hence; this type was chosen as providing the best fit for this study. In order to create the most holistic portrayal of the case as possible, a number of different participant groups (students, guidance counsellors, and parents) were researched and these groups were studied using a number of different research methods (questionnaires, interviews and focus groups). The overarching research question of the study focused on exploring how high-ability students from socio-economic disadvantaged schools who have participated in a summer academic programme view their experiences. The ultimate aim of this study was to generate a descriptive account of students' experiences within the Aiming High programme. In order to achieve this, a number of specific research questions were posed. These research questions are outlined below:

- How do students benefit from participating in the courses?
- Does taking part in a university programme shape students' opinions towards higher education?
- Is there any impact for students when they return to school after participating in a summer programme?
- Are there any negative consequences for students taking part in the courses?
- What aspects of the programme's design assist in shaping students' experiences?

6.3. Exploring Students Experiences within Aiming High

This section intends to revisit the research questions in light of the findings from this study.

The overall assertion to be made from this study is that the students had a positive experience while on the programme. Students benefitted academically, socially and personally from participating in the initiative. Before the specific benefits to programme participation are outlined, one of the most profound findings which became apparent throughout the research is how the programme has grown within the past five years. As stated within the first chapter, prior to 2010, less than one percent of students participating in the older student programmes at CTYI came from the DCU Access-linked schools. It is quite remarkable that by summer 2015, this figure had increased to nearly 12 percent (See Section 1.4.1 and Chart 4.1).

6.3.1. Academic Benefits

In terms of the academic experience of students, there were a number of benefits. First, the courses gave students the opportunity to experience a challenging and stimulating learning environment which they would be unlikely to enter without the presence of such an initiative. The subjects offered at CTYI give students the unique chance to study a subject intensively over a two or three week period, with the subjects offered often deviating from the school curriculum and holding more of a resemblance to the material studied at third-level.

As the subjects at CTYI are taught by graduates or professionals related to the subject, the courses at CTYI give students an idea of what subjects would be like if they went on to pursue an area of study in university. This feature of the programmes is important as the courses at CTYI assist in making what students learn in school about university and career

paths real. An example was given of one student who had studied Medicine in CTYI for three weeks. He undertook this subject as he thought that he might like to study Medicine after school but was undecided. Following his completion of the course at CTYI, he realised that he really enjoyed the subject and that a medical career was for him. Since finishing school, he has progressed onto university where he is currently studying for his medical degree. Yet while courses may be useful in deciding on a career path, they may also be useful in establishing what a career actually entails and how it can differ from a student's expectations. A reference was also given of a student who undertook a course in Veterinary Science after developing an interest in the area. During the course, the student realised that she had an unrealistic expectation of the job and that it was much gorier than she had initially realised!

The distinctive element of the Aiming High initiative is that it provides students with a '*sustained commitment*' to take part in a number of courses over a number of years (if identified early). Such a commitment is in line with best practice within the field (Olszewski-Kubilius, 2007). By giving students the chance to study a number of courses, they have the unique opportunity of being able to study a range of subjects with the ultimate goal of finding an area which really stimulates their learning and allows them to develop their talents.

In terms of the connection between the learning experiences for students within CTYI and when the students returned to school, the majority believed that the courses led them to have positive experiences when they returned to school. This became especially evident in cases when students studied courses which were similar to ones studied in school. For example, one student who undertook the General Science course at CTYI stated that he felt very confident with the material he learnt at CTYI and this helped when he returned to school. He was then able to share his experience and notes with his classmates on the

topics covered. One of the most interesting and unexpected findings relates to students when they returned to school. For the students who felt that they were able to openly talk about their experience, they promoted and recommended it to other students. In a way, these students acted as 'ambassadors' for the programme, and highlighted to other students how their experience benefitted them in more ways than just positive outcomes. These students often in turn, encouraged other students to self-select themselves to take part. A number of the previous students who have since moved onto university, where their course at CTYI mirrored their course at university, expressed favourable comments in relation to having familiarity with the material which was covered as part of their undergraduate studies.

All of the participants indicated that being in the presence of an academically challenging peer group impacted positively on them. The courses seemed to build their academic confidence in that they are able to hold their own amongst students who are often older than them.

While the summer programmes at CTYI are short in duration, Matthews and McBee (2007) argue through their research of a summer programme that that positive behavioural changes can occur even after short timeframe.

6.3.2. Social Benefits

The courses at CTYI are also important in catering to the student's social development. The structure of the student daily timetable facilitates social interaction amongst students and provides them with the opportunity to build new peer relationships and if relevant, to reunite with old friends. In most cases, students will come onto the programme alone and with the expectation of making friends and this gives the social dimension of the

programme an even more pivotal role in contributing to a positive student experience. As CTYI attracts students from around the country and internationally, the students from the local communities are able to interact with students from a diverse range of backgrounds. The friendships formed during the summer courses often act as a 'pull-factor' for many of the students coming back to CTYI. Remarkably, a number of the previous students who have since left school are still in contact with the friends on the programme despite a number of years after the programme completion.

The courses at CTYI do not aim to create distance between the CTYI participants and their school peers. Rather, the initiative intends to provide students with the chance to interact with a diverse group of students from a range of different backgrounds who may often share the same interests as them.

6.3.3. Personal Benefits

There were also a number of personal benefits for students participating on the programme. Many of the students perceived an increase in their own confidence in relation to their own ability and talent. This perceived increase in confidence was reiterated countless times by parents and guidance counsellors. As one of the guidance counsellors pointed out, it is often the students that cause trouble who receive most of the attention within the school, while the students who stay out of trouble and want to do well often fly under the radar. Finally, the students also considered the positive recognition which the courses gave as favourable. While some of the students may have not told their friends or peers about participating in the courses, the parents and guidance counsellors spoke about how the recognition from their school and by CTYI marking their academic talent was seen as encouraging and positive for their development.

The findings from this study largely corroborate the positive findings as to the benefits of the courses from other research studies within the field in relation to ‘regular’ students within gifted programmes (VanTassel-Baska, 1984; CTY, n.d). This study is important as it provides new insights into high-ability students from socio-economic disadvantaged backgrounds. There are many similarities with this research study and the work done by Kaul (2014) in her research examining the Project Promise programme. However, Kaul’s research is more positivistic, quantitative and experimental in nature. The case study methodology generates an account about the lived experience of these students and other important stakeholders, and gives a much more in-depth account of this educational intervention than is possible with largely quantitative studies.

6.3.4. Negative Outcomes

In attempting to establish a holistic account of the case, a number of negative consequences relating to programme participation also became apparent. The main negative finding stemmed from the belief that their peers would judge them negatively for participating in the courses or as a number of the students called it, “nerd camp”. The stigma that students felt about participating in the courses is backed up within the literature (see section 2.13) (Berlin 2009; Cross & Coleman, 1993; Coleman & Cross, 1988). While the parents and the school personnel generally viewed programme participation positively, some of the students felt that there was a certain “stigma” attached to CTYI. It must be stated that all of the students interviewed and probed about a stigma, felt that they were able to deal with such comments and as a result, it did not let it affect their decision to take part. At the same time, if a perceived stigma is present, such negative feelings may have affected an unknown group of students before they attended CTYI for assessment, or before they applied for a place on the summer courses rather than towards the end of the summer programme when the research took place.

Another negative finding from the research relates to the length of the CAT and the Summer Scholars programme in contrast to the CTYI sessions. As stated previously, the CTYI programme runs for three weeks with the CAT and Summer Scholars programme each lasting two weeks. As illustrated within the Context Chapter, the majority of the participating students under the Aiming High scheme fall into the CAT or Summer Scholars programmes (see Figure 4.3). The differences between the three different programmes are often diluted when students are on campus as they integrate with each other during social time. As a result, many students build up friendships with students on different programmes. Many of the students expressed a desire for the CAT and Summer Scholars programmes to be extended to three weeks in line with the CTYI courses so that they could stay with their friends.

6.4. Link to the Higher Education Environment

A common and recurring theme running through the educational policy literature is the need for interventions and programming strategies to increase participation levels from under-represented lower socio-economic groups within the higher education system (HEA, 2014; Mc Coy et al., 2010; James, 2007).

The Aiming High initiative gives students from areas of socio-economic disadvantage access to a special learning opportunity and the “opportunity to preview college life” (Olseweweki-Kubilius & Clarenbach, 2012, p.11). From the data, the desire to attend third-level education was undoubtedly strong amongst the sample of the *current student* cohort with the vast majority expressing a desire to attend further or higher education. While the *current student* cohort provides interesting data in relation to educational aspirations, the most stimulating finding in terms of the programmes creating a link with the higher education environment are evident from the *previous student* cohort.

While this group is still relatively small in terms of the data collected in comparison to the *current student* group, there were favourable outcomes expressed by students in relation to feelings of competence and knowledge in acclimatising to university life. Additionally, the previous students of the programme often acted as advocates of the initiative to other potential CTYI students as the following quote illustrates;

“I got to experience university life at a younger age and it prepared me to go and motivated me to go onto university...It’s a great experience to study new topics at an age that wasn’t readily available anywhere else for me... Recently, a family friend has been offered a scholarship by her school. She was a bit unsure whether to go ahead and do it but I assured her it’s a very worthwhile course.” (Previous Student, 139(X), CAT, various subjects)

The *Leaving School in Ireland* study (McCoy et al., 2014) clearly highlights the beneficial nature of learning experiences during the school years to assist in minimising any academic and social difficulties in the post-school period. Within the study, ‘academic difficulties’ was one of the most cited reasons from students for an early departure from a course- with students reporting that the course did not meet their expectations (p.188). Aiming High gives students, the opportunity to preview university-style course and college life at an early age, and hopes in the process to ease the post-school transition period for the participating students if they proceed onto university.

6.4.1. Building a Connection to DCU

One of the key aims of educational policy publications and findings from previous research studies is the need to engage for HEI’s to engage students and communities of disadvantage with their programmes and activities (HEA, 2014; Mc Coy et al., 2014; Adnett, 2006; HEA, 2008, 2010).

The courses at CTYI strengthen the connection between students, parents and the participating schools which is typically first created by the DCU Access Service.

It is interesting to note that while the majority of the students had been on campus prior to the summer courses at CTYI, their parents had not. While most of the students reported regularly attending events and workshops on campus organised by the DCU Access Service, many of the parents had never visited the campus before establishing a link with CTYI. The parents felt that they simply had no reason to visit the campus before coming onto campus for the assessment, awards ceremonies or programme orientation. When the parents were questioned about their initial views of the campus, they were impressed in relation to the facilities and the scale of the campus which they had not suspected. Even though parents may lack the “insider knowledge” of the higher education system, building their support in relation to higher education is crucial from the early stages in order to minimise any post-school transition difficulties for the students involved which are more likely for students coming from disadvantaged backgrounds (McCoy et al., 2014, p.xv).

From the data collection which was undertaken with the students, it seems that the student experience on the courses at CTYI can help foster a desire for students to return to DCU upon completion of their secondary school studies. The data from the sample of students studied in summer 2014, the majority responded that DCU is a university which they could see themselves attending in the future.

6.5. Programme Design, Stakeholders and Replication

The design of the Aiming High initiative is important to examine as it has a role in the delivery of the programme on the identified population. The need for such an explicit elaboration of the various features of the programme is equally justified in light of the study's methodology which is interested in the holistic description and explanation of phenomenon within a bounded system (Merriam, 2009). One of the most helpful elements of Aiming High is that it mirrors and is integrated into the CTYI older student programmes. While there are different fee structures for students in this case (see Table 1.4), no further differentiation is made after their applications are processed.

In terms of the more micro-details of the programming structure, while the courses are short in duration, the intensive nature of the courses and the design of the student daily timetable (see Figure 4.6) seem to maximise students' academic, social and personal development. The special features of the courses, such as the awards ceremonies, help recognise student achievement and participation and critically build and foster support amongst the students, parents and schools.

The next section will focus on three areas. First, the defining features of the initiative; second, the role of the programme stakeholders; and third, programme replication. Each of these three areas are important to discuss as they assist in shaping the experiences of students while on the programme, while also contributing to the descriptive nature of the case.

6.5.1. Defining Features for Aiming High

The three significant features of the Aiming High initiative are outlined below.

6.5.1.1. Integration of Students

One of the defining elements of this programme is that it integrates students coming from under-represented and under-identified communities into the mainstream older CTYI programmes. While many other intervention-style programmes (e.g. Camp Launch; Project EXCITE; Centre for Academic Achievement (CAA)- see section 2.3.3.2) tend to separate these students by creating separate or stand-alone programmes in order to facilitate their academic development, this initiative mixes students together in order to create a diverse student population. While stand-alone programmes can also be advantageous in targeting students in order to raise achievement levels of under-represented groups (Olszewski-Kubilius & Thomson, 2010), there are also benefits to integrating students into a diverse peer group from a range of socio-economic backgrounds- after all, this is how the higher education environment works. Throughout the data collection period, no negative feedback was offered in relation to the group composition throughout the programmes. Rather, a number of students expressed an interest in exploring the differing opinions and stories that emerged from having students from a range of backgrounds represented. Likewise, the guidance counsellors felt that by participating in the programme, the students from traditionally marginalised backgrounds would be better integrated into the “main education setting” (GC(R), 2013).

6.5.1.2. Sustained Commitment

Aiming High offers a sustained commitment over a number of years to the students involved. Once a student is enrolled within the programme, they have the opportunity to participate throughout their secondary school years for a subsidised fee. Essentially, if identified early, students can sample a number of courses over their school years.

CTYI recognises that it is vital to offer students the chance to study a number of courses in order to develop their academic talents and interests. As a result, CTYI ensures that students are informed about the programme annually. From the literature, Olszewski-Kubilius (2007) reports that such a sustained commitment is crucial as the lack of long-term support for students from disadvantaged backgrounds is one which often greatly hinders their success.

6.5.1.3. Presence of Three Different Academic Programmes

All students who sit the assessment with CTYI are offered the chance to take part in a course with CTYI. While many gifted programmes offer students “one-shot” for entry into the programmes, the presence of three programmes gives all students the opportunity to take part in an academic programme. While there are subtle nuances in relation to the various programme features of the three older programmes in CTYI, all three programmes are highly academic in their outlook.

6.5.2. Programme Stakeholders

Each of the six identified stakeholders has a distinct and differentiated impact on the student experience (see Figure 4.4). The success of the initiative for a large part rests with the co-ordinated and integrated response from each of the stakeholder groups. While the role of the school authorities and parents was examined in detail, it needs to be stated that the DCU Access Service has a pivotal role in ensuring the success and the continuation of such a programme. Although the Access Service has no involvement in relation to the day-to-day delivery of the programme, they are an essential intermediary organisation which liaise with the various participating schools and promote the benefits of programme participation on CTYI’s behalf.

As has been emphasised before, all of the identified stakeholder groups (see Figure 4.4) contribute to the initiative, yet the role of schools and parents are particularly important in working with the students before, during and after the programme. Although the role of these stakeholders was discussed at length within the Context Chapter, it is important to discuss their role in light of relating literature.

6.5.2.1. Schools

The majority of literature within the field relating to the role of schools for students in areas of disadvantage focuses on addressing the misconceptions teachers have in relation to identifying students for academic programming opportunities (Borland, 2004; Swanson, 2010; VanTassel-Baska et al., 2004). Olszewski-Kubilius and Clarenbach (2012) make the valid point that even if students are identified, there may be the lack of financial resources within the families to send them onto tuition-based summer programmes. One of most notable features of the Aiming High programme is the existence of a subsidised fee scheme which gives the schools involved the ability to offer parents the opportunity at an affordable and reasonable cost.

Swanson (2010) suggests that for low-income gifted learners it is often the teachers who act as 'gatekeepers'. In this case, it is also the school authorities who are the 'gatekeepers' of this programme and who decide which students to send forward for identification with CTYI. Interestingly, this screening process within the school often takes place *behind the scenes* with the student's scores in classroom tests with perhaps a small number of secondary considerations such as a teacher recommendation, or student self-section, being used as the criteria to nominate students for assessment with CTYI.

The guidance counsellors reported that in the vast majority of cases, the parents were very supportive in relation to the learning opportunity offered by Aiming High when presented with all of the information. During the interviews, the guidance counsellors spoke about informing the parents about the assessment and programme. It became clear during the parent interviews that the relationship between the school and parents was of critical importance. For the parents who had never heard of CTYI before, having the guidance counsellor and/or the school principal address these concerns and answer any questions which they had in relation to the programme was invaluable.

For the students, who may have little or no history of higher education within their families, the schools also have an important role in relation to the promotion of higher education opportunities. One of the guidance counsellors summed it up well, drawing a link between the career guidance work carried out in school and the courses in DCU in making what is taught in school- “real” (GC, (H), 2013).

6.5.2.2. Parents

The view that parents from areas of socio-economic disadvantage and poverty have little interest in promoting the benefits of higher education participation is now considered too “biased and simplistic” (Hanafin & Lynch, 2002, p.39). Even though students from areas of disadvantage may have less access to the same resources to support and develop their talents than students from higher socioeconomic status homes (VanTassel-Baska, 1989), a lack of parental support for high achievement should not be assumed. On the contrary, Kelleaghan et al., (1995, p.36) suggests that the home “atmosphere” which comprises of ‘home organization, parental expectations and parent-child interaction’ are the most important factors in relation to a child’s educational achievement.

None of the parents interviewed had attended to university, yet even so, there was unanimous agreement as to the importance of education and value of higher education. All of the parents expressed the desire that they would like their child (or children) to proceed onto university. The parents interviewed fully understood the benefits of earning a third-level qualification and they believed that their children had the potential and capability to succeed at higher levels of education than themselves.

Nevertheless, the parents also felt in the event of their child expressing a desire to pursue a path other than further education; they would also support that;

“You have more opportunities if you have a degree. I’m not going to force him or traumatise him, like if they don’t want to go onto college and want to do carpentry or more of an apprenticeship if that’s what they want to do but we would aim more for third level”. (Parent, 126(S), Focus Group, 2013).

The parents recognised that the courses at CTYI were important in giving students an experience of university life. As none of the parents had attended university, they could not share their own experience and knowledge about such an opportunity, and as a result, they considered the courses as a chance for their children to learn what is involved for themselves. The parents also believed that giving students the opportunity to try out different subjects each summer was constructive and beneficial in developing their interests. There was also a feeling that the courses gave students a sense of independence as many of the students commuted to and from campus on their own.

Needless to say, the parents had two concerns when they first heard about CTYI from the school. The first, related to establishing ‘what CTYI was’ and how would the experience be beneficial. The question as to how taking part would be beneficial for students was at the forefront of the vast majority of the parents’ minds as they had never before heard of CTYI.

The secondary and perhaps the main concern related to the financial cost of the programmes. The cost of the courses and the importance of the associated funding under the scheme was a major talking point within the focus groups.

The schools are instrumental in relation to informing the parents and addressing concerns about CTYI and the financial cost of the courses. The parents trust the school authorities to have their child's best interests in mind and as a result feelings of uncertainty in relation to the programmes were quashed at an early stage. During the interviews and focus groups, there were parents from a range of the participating schools and the support which they received from the corresponding schools seemed to be universal.

The parents interviewed were complimentary in relation to CTYI and the impact of the initiative. Gaining and fostering support for the programme amongst parents is recognised as crucial at CTYI as without it, the programme would cease. The awards ceremonies held after the Talent Search assessment and the summer programmes reward student achievement and participation. In addition, these ceremonies also have an important role in creating and maintaining support amongst parents for CTYI.

Finally, from the perspective of the students, the majority felt that their parents were a major source of encouragement in taking part in CTYI. While participating in the courses ultimately was the students' own decision, the students felt that they were supported at home.

6.5.3. Programme Replication

This thesis aims to contribute and deliver an innovative programming strategy for low-income, high-ability learners. A creative strategy was called for from within the gifted education field by Olszweski-Kubilius and Clarenbach (2012) when they suggested the need to create a research agenda focusing on high-ability, low-income learners in order to create evidence-based models.

In terms of the uniqueness of the programme, the three defining features (see section 6.5.1) of Aiming High make the programme unique and responsive to the needs of various abilities. Within this programme, the integration of students under the Aiming High scheme into the three older student programme goes unnoticed after the application processing phase. The sustained commitment to the students over a number of years and the presence of three older student programmes facilitates each student to undertake a programme should they have the desire and motivation to do so.

With that said, making generalisations about the power of this intervention amongst the population of high-ability, low income students within the field of gifted education is difficult. The main difficulty lies with the classification of key terms such as, 'poverty', as 'poverty can manifest itself differently based on geography, ethnicity and race'. (Olszweski-Kubilius & Clarenbach, 2012, p.3) To put it simply, what works with one group of students may clash dramatically with another given a different context. There can be lessons learnt but it would be wrong to devise a 'one size fits all' programme to cater to the needs of high-ability students from low-income backgrounds. This issue of generalisability is one which also faces case study research, and hence a parallel can be drawn. The value of case study research, and of this case, lies with the reader and what they can learn through the researcher's narrative description.

Stake (2005) refers to this as "knowledge transfer", and he explains how this works;

(Case researchers) "...will, like others, pass along to reader some of their personal meanings of events and relationships-and fail to pass along others. They know that the reader, too, will add and subtract, invent and shape-reconstructing the knowledge in ways that leave it...more likely to be personally useful." (p.455)

The onus is on the reader, and not the researcher to determine what can be applied or transferred to another context (Merriam, 2009).

6.6. Significance and Implications of the Research

This study is a significant piece of research which highlights a practical programming strategy for targeting and addressing the low-participation levels of students from areas of disadvantage within CTYI's programmes. This initiative complements the work of the DCU Access Service and allows second-level students the opportunity to access and become familiar with the DCU campus should they wish to proceed onto university after they leave school. While there has been significant progress in broadening access to higher education for young people from lower socio-economic groups, there is also "an uncomfortable and sobering fact that deep reservoirs of educational disadvantage are also a part of the higher education story" (HEA, 2014, p.3). The participating students in Aiming High often have no familial experience of higher education; as a result, these young people must navigate this unfamiliar territory on their own. The opportunity provided to attend CTYI gives these students the chance to study university-style subjects within a higher education environment amongst a diverse group of students.

6.6.1. Policy Implications

This research study has significant implications for educational policy in relation to all high-ability learners. Specifically, this research study aims to highlight the positive nature of the Aiming High programme in terms of the academic, social and personal benefits of the initiative in serving the needs of high-ability students from low-income backgrounds which they would not have been able to access without the special funding in place.

It can be argued, that there are statutory provisions made for 'exceptionally able students' within Irish legislation. However, during a time economic austerity, and within a country which has an egalitarian educational philosophy (see section 1.3.3), it is clear that such students are less likely to be allocated resources ahead of other 'at-risk' groups.

Nonetheless, as the economic situation within the country improves, and when the Act of 2004 is fully in force ‘exceptionally able students’ will have statutory entitlements to all the relevant services under the Act “including assessment, appeals, individual education plans and the provision of services in common with all children who have special educational needs” (Glendenning, 2012, p.280).

6.6.2. Identification

Identifying students from areas of disadvantage for gifted programming is an area of contention within the field. While a number of students considered the length of the two-week CAT and Summer Scholars programmes too short in comparison to the three-week CTYI programme, no negative comments were made in relation to finding the course too easy, too slow or unchallenging. This would seem to suggest that the identification model used ensures that students chosen for the Aiming High initiative are capable of engaging with CTYI’s programmes at an appropriate level. Yet, while the current model seems to work well, we cannot ignore *best practice* within the field and the movement towards using multiple criteria for identifying high-ability, low-income students.

6.6.3. The Importance of Funding and Scholarships

It is hard to relay the narrative of appreciation expressed by the parents and the guidance counsellors with regard to the presence of such an initiative. To state it simply, without the presence of such funding, the students identified from the Access-linked DEIS schools would not be able to take part in the courses.

A common element which ran through all of the parent focus groups and interviews was how the cost of the ‘normal’ course fees would be “impossible” to meet.

Many of the parents expressed feelings of anxiousness and concern when they first heard about their child being nominated for the programme. This trepidation arose from the fear of associated high costs. Once the parents received reassurance from the school authorities as to the reduced fee scheme and the benefits of the programme, such feelings subsided and the parents interviewed felt positive and supportive about the programme. The parents all realised how this is a special opportunity, “that doesn’t come often where we live” (Parent 126(S), Focus Group, 2013).

The guidance counsellors also recognised the importance of the subsidised fee scheme to enable student participation on the programme. During the interviews, all the guidance counsellors outlined how they dealt with concerns from parents in relation to the financial cost of the courses. They confirmed that fee issues were the main concern for parents when they first heard about the opportunity. While the guidance counsellors spoke about a desire to increase the number of students accessing the programme, there was awareness from those schools which covered the course fees that this extra cost would place financial pressure on the school and with the increase in student numbers; this may lead to a revision of funding practices within the school.

From the students’ point of view, there was little mention of the financial aspects of the programme. While the parents and guidance counsellors were more explicit in their opinions in relation to the scholarship, students remained quieter about it, perhaps not realising or wanting to acknowledge it or indeed realising that something was different. There were a number of references to the presence of a scholarship scheme within the student responses in a number of the questionnaires but references to this scheme were kept to a minimum in comparison to other participant groups.

6.7. Recommendations

Since its launch in 2010, any of the initial teething problems which may have surrounded the Aiming High initiative have been resolved. One of the most important features of Aiming High is that it seamlessly integrates into the older student programmes at CTYI. Nevertheless, throughout the course of this study, a number of recommendations and possible areas for improvement have become apparent.

6.7.1 Identification

At present, the DCU Access-linked schools do not receive any guidance or information from CTYI on selecting students for assessment. From examining the identification policies from other academic programmes which work with low-income, high-ability students (see section 2.3.3.2); it is clear that there is guidance and criteria given to schools from the organisation running the corresponding programme. This information usually includes strategies for identifying high-ability students who may have the potential or capabilities to take part but who may not score highly on achievement tests.

I, therefore recommend that CTYI should compile a briefing document for each school in order to provide them with guidance and information regarding useful strategies to identify high-ability students. These criteria may include information in relation to qualitative identification tools which were outlined in the Literature Review Chapter (Table 2.2). Such tools include: student observations, interviews, and portfolios. Interestingly, Ledwith (2013) used and continues to ask students who wish to participate in the Early University Entrance Programme (EUE- see section 3.3.2) to submit a 'letter of motivation' upon application for the programme in order to understand their aims and reasons for wishing to take part in the programme.

6.7.2. A Separate Application Form for Aiming High Participating Schools

During the data collection, it became apparent amongst the parents and the guidance counsellors that there was often confusion in relation to the cost of the programme fees (see sections 4.6.4 & 4.6.3.3). To alleviate such confusion, I recommend a separate application form for the Aiming High participating schools which states all of the information (i.e. fee amounts, the policy of *sustained commitment*) relating to the scholarship scheme.

6.7.3. Linking CAA Students to Aiming High

While one of the central aims of the Aiming High programme is to integrate the primary-level CAA students into the Aiming High programme (see section 4.3.1), there is no defined procedure for doing this in a way that might guarantee success. Throughout the data collection, there was very little reference from students who had attended the primary school programmes in CTYI under the CAA initiative. There is a need to create a strategy linking the CAA primary school graduates into the Aiming High initiative in order to maximise the sustained commitment and the benefits of such a special learning opportunity. Although the CAA programme is not directly related to this case, it is important to include within the recommendations as these students should feed into the Aiming High programme and consequently, maximise the sustained commitment of CTYI to the participating students.

6.8. Limitations of the Study

This study has a number of limitations.

One of the main limitations relates to the size of the previous student cohort in terms of the data which was collected from this participant group. It would have been beneficial to have a larger group of students who have taken part in the courses for a number of years and who have left since school. It would be interesting to understand from their perspectives the impact of the courses on their lives. This study relies more heavily upon the views of the current student perspective, and while this group are the focus of the study, it would be intriguing to study those students who took part the programme for a number of years.

Another limitation of the study relates to the guidance counsellor cohort. This group of participants provided rich and interesting data, yet, it would have been valuable to have conducted a greater number of interviews with this group. In general, while there was a high response rate amongst the guidance counsellors with the questionnaires (see Appendix F) many of the guidance counsellors were less forthcoming about taking part in a follow-up interview.

6.9. Areas for Future Research

There is scope to develop this case study in a number of different ways.

One potential further avenue of research would be to develop the study longitudinally. This would be particularly interesting if a sample could be generated of students who have participated in both the primary school Centre of Academic Achievement (CAA) programme and in the secondary school programme, Aiming High. In turn, the study could continue to explore student experiences when they complete their compulsory second level schooling.

Another potential area for further study would be to examine if inter-programme differences exist between the three older student programmes (i.e. CTYI versus CAT versus Summer Scholars), and if so how and what?

6.10. Conclusion

This chapter aims to tie together the study's findings and the contextual information relating to the case in light of the literature from the field.

This chapter addressed a number of different areas. First, it revisited the study's research questions and outlined the benefits and the negative elements relating to experiences of students within the Aiming High case. It also considered the various aspects of the programme's design which are crucial to discuss within a case study. This chapter also reflected on the significance and implications of the research and made a number of recommendations as the initiative moves forward. Finally, the limitations and areas for future research were set out.

This case study set out to explore the experiences of students within the Aiming High initiative. For me, the research findings were surprising to the extent of how instrumental and how profound an effect the experience of CTYI had on the participating students. One of the most hard-hitting elements which became clear throughout the data collection phases and which will stay with me long past the conclusion of this thesis is the deep appreciation from the parents and the guidance counsellors in providing such opportunities to these young people. Without funding and support, these students would be unable to experience such a special learning opportunity which would often go unquestioned for students from higher socio-economic backgrounds. Above all, the findings demonstrate how such an initiative represents an effective programming strategy

for high-ability low-income students across various dimensions that should without question continue for many years to come.

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Appendices

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Appendix A- Research Ethics Forms

Ethical Approval from Dublin City University

Ollscoil Chathair Bhaile Átha Cliath
Dublin City University



Ms. Eileen Elizabeth Breslin
School of Education Studies

2nd April 2013

REC Reference: DCUREG/2013/008

Proposal Title: **An exploration into the academic and social effects of summer enrichment programmes on second level students from socio-economic disadvantaged schools**

Applicants: Ms. Eileen Elizabeth Breslin, Dr. Colm O'Reilly, Dr. Joe O'Hara

Dear Eileen,

Further to expedited review, the DCU Research Ethics Committee approves this research proposal. Materials used to recruit participants should note that ethical approval for this project has been obtained from the Dublin City University Research Ethics Committee. Should substantial modifications to the research protocol be required at a later stage, a further submission should be made to the REC.

Yours sincerely,

A handwritten signature in black ink that reads 'Donal O'Mathuna'.

Dr. Donal O'Mathuna
Chairperson
DCU Research Ethics Committee



Taighde & Nuálaíocht Tacaíocht
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Appendix A- Research Ethical Forms

Plain Language Statement

All Participants

Dear Student/ Parent/ Guidance Counsellor,

This research is being carried out by Ms. Eileen Elizabeth Breslin as part of a Ph.D. thesis with the Irish Centre for Talented Youth (CTYI) and the School of Education at Dublin City University. It is being conducted under the supervision of Dr. Colm O' Reilly (Director-Irish Centre for Talented Youth) and Prof. Joe O' Hara (School of Education-Dublin City University).

The aim of this study is to gain an understanding of the impact of CTYI's second-level summer academic programmes on the participating students from the DCU-Access linked schools. Upon completion, this research hopes to bring greater attention to the benefits of such an opportunity and to establish what changes can be made to programmes at CTYI in order to maximise their effectiveness in catering to the needs of those who take part in the programmes.

The research shall involve the completion of at least one questionnaire, and one face-to-face interview, and the *possibility* of a focus group with other CTYI participants. All interviews and focus groups will be audio-taped. The interviews and/or focus groups should take no longer than one hour. All student and parent interviews and/or focus groups shall be completed on the DCU campus, while guidance counsellor interviews will be carried out in the corresponding school.

All the information that is gathered as part of this study will be treated as highly confidential, and no names will be used in any form in the published research. All the research data gathered will be locked securely in an office at DCU at all times and only the researcher will have access to this information.

Please be advised that participation in the research study is **completely voluntary** and any participant may withdraw from the study at any point without facing any penalties or negative effects in taking further courses with CTYI or at Dublin City University.

If you have any further questions regarding the research, feel free to contact me at any time on (01) 700 8482 or email: eileen.breslin2@mail.dcu.ie

If participants have concerns about this study and wish to contact an independent person, please contact:

Appendix A

The Secretary, Dublin City University Research Ethics Committee, c/o Office of the Vice President for Research, Dublin City University, Dublin 9. Tel 01-7008000

Student Informed Consent Form

Dear Student (and Parents),

As a participant in a previous summer programme with the Irish Centre of Talented Youth (CTYI) at Dublin City University, you are being invited to take part in research aimed at gaining an understanding of the impact of the CTYI's secondary school summer academic programmes.

This research is being carried out by Ms. Eileen Elizabeth Breslin as part of a PhD thesis with the Irish Centre for Talented Youth (CTYI) and the School of Education at Dublin City University. The study is being conducted under the supervision of Dr. Colm O' Reilly (Director- Irish Centre for Talented Youth) and Prof. Joe O' Hara (School of Education- Dublin City University).

Please complete the following (Circle Yes or No for each question)

- | | |
|---|--------|
| Have you read or had read to you the Plain Language Statement | Yes/No |
| Do you understand the information provided? | Yes/No |
| Have you had an opportunity to ask questions and discuss this study? | Yes/No |
| Have you received satisfactory answers to all your questions? | Yes/No |
| Are you aware that if selected your follow up interview will be audiotaped? | Yes/No |

Please note that participation in the research study is **completely voluntary** and that you may withdraw from the study at any point without facing any penalties with CTYI or at DCU.

All research materials shall be kept in a secure locked facility at the CTYI offices in Dublin City University with the data collected being destroyed five years after the research publication date.

All information that is gathered as part of this study will be treated as highly confidential, and no names will be used in any form of the published research.

Appendix A

If you agree to take part in the research, please complete the below:

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project.

Participant's signature: _____

Participant's name in block capitals: _____

(Please note that parental consent must be gained prior to take part in the research)

Parent(s)/ Guardian(s) name: _____

Parent(s)/ Guardian(s) signature: _____

Date: _____

Parent/Guidance Counsellor Informed Consent Form

Dear Parent/ Guidance Counsellor,

You are being invited to take part in this research study as you have had experience of a child/pupil participate in a summer course with the Centre for Talented Youth, Ireland. This research study aims to gain an understanding of the impact of CTYI's second-level summer academic programmes.

This research is being carried out by Ms. Eileen Elizabeth Breslin as part of a PhD thesis with the Irish Centre for Talented Youth (CTYI) and the School of Education at Dublin City University. The study is being conducted under the supervision of Dr. Colm O' Reilly (Director- Irish Centre for Talented Youth) and Prof. Joe O' Hara (School of Education- Dublin City University).

Please complete the following (Circle Yes or No for each question)

- | | |
|---|--------|
| Have you read or had read to you the Plain Language Statement | Yes/No |
| Do you understand the information provided? | Yes/No |
| Have you had an opportunity to ask questions and discuss this study? | Yes/No |
| Have you received satisfactory answers to all your questions? | Yes/No |
| Are you aware that if selected your follow up interview will be audiotaped? | Yes/No |

Please note that participation in the research study is **completely voluntary** and that you may withdraw from the study at any point without facing any penalties with CTYI or at DCU.

All research materials shall be kept in a secure locked facility at the CTYI offices in Dublin City University with the data collected being destroyed five years after the research publication date. All information that is gathered as part of this study will be treated as highly confidential, and no names will be used in any form of the published research.

Appendix A

If you agree to take part in the research, please complete the below:

I have read and understood the information in this form. My questions and concerns have been answered by the researchers, and I have a copy of this consent form. Therefore, I consent to take part in this research project.


Participant's signature: _____

Participant's name in block capitals: _____

Date: _____

Type of participant: Guidance Counsellor Parent

Appendix B- EPSEN Act 2004. Commencement Information


Irish Statute Book
Produced by the Office of the Attorney General

Title Search - Search for word(s) / phrase in Title of Act or Statutory Instrument
 Acts SIs [More Search Options](#)
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[Pre 1922 Acts](#) >
[Statutory Instruments](#) >
[Legislation Directory](#) ●

Education for Persons with Special Educational Needs Act 2004.


No. 30 of 2004

Contents

- [→ Commencement](#)
- [→ Other Associated Secondary Legislation](#)
- [→ Effects](#)

Commencement

Section	Commencement Date	Commencement Information
Ss. 1, 2	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2
Ss. 3-13	Not yet commenced	Requires commencement order under s. 53(2)
S. 14(1)(a)	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2
S. 14(1)(b)	Not yet commenced	Requires commencement order under s. 53(2)
S. 14(1)(c)	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2
S. 14(1)(d)-(f)	Not yet commenced	Requires commencement order under s. 53(2)
S. 14(2)-(4)	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2
Ss. 15-18	Not yet commenced	Requires commencement order under s. 53(2)
Ss. 19-37	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2
Ss. 38, 39	Not yet commenced	Requires commencement order under s. 53(2)
Ss. 40-44	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2
Ss. 45-49	1 October 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) (No. 2) Order 2005 (S.I. No. 636 of 2005), art. 2
Ss. 50-53	14 July 2005	Education for Persons with Special Educational Needs Act 2004 (Commencement) Order 2005 (S.I. No. 507 of 2005), art. 2

[BrowseAloud](#)


Appendix C- Table of Research Participants

This piece of research was conducted over a number of years from 2011-2014. In total, 139 participants took part in the research. These participants fit into four participant groups; current students, previous students, guidance counsellors, and parents. In order to preserve the anonymity of these participants, each has been assigned a number (from 1-139) to distinguish between each. The vast majority of participants can also be attached to a specific school. The focus of this case study centres around twenty-four schools (with a number of 'other' special cases being classified together as one category). In terms of coding each of these schools, each of the twenty-four Access schools has each been randomly assigned a letter (A-X), with the 'other' category being labelled as 'Y'. By assigning a letter to each of the schools, individual participants can be linked back to their respective school while maintaining their anonymity. A table has been compiled to distinguish each of these participants according to a number of attributes. Throughout the thesis, a standardised format shall be used to distinguish each participant. This shall follow the following format;

(Participant Type, Participant ID & School ID, Programme, Subject (*if relevant*), and Year)

(e.g. Current Student, 5(B), CAT, Engineering, 2013)

Appendix A-Table of Research Participants

Participant ID	This is the unique participant ID to distinguish each participant. Over the course of the research, there were 139 participants.
School ID	Twenty-five categories from A-Y.
Participant Type	This field relates to the type of participant within the research. There are four types: <ul style="list-style-type: none"> • Current Students • Guidance Counsellors • Parents • Previous Students
Year	The year of participation (or data collection-2011)
Programme	The older student programme which the student participated in; <ul style="list-style-type: none"> • Centre for Talented Youth Summer Academic Programme (CTYI) • Centre of Academic Talent (CAT) • DCU Summer Scholars (SS)
Research Tool	The research tool which was used to gather data. Three research tools were used to collect data: <ul style="list-style-type: none"> • Questionnaires • Interviews • Focus groups
Subject	The subject studied at CTYI
Age (Students Only)	Age of the participating students at the time of data collection
Focus Group Number (Parents Only)	Four focus groups were carried out with parents. Roman numerals distinguish between each of these groups (I, II, III, IV)

Appendix C

Participant ID	School ID	Participant Type	Year	Programme	Research Tool	Subject	Age	FG no. (Parents Only)
1	B	Current Student	2011	SS	Questionnaire	Engineering & Computing	16	
2	B	Current Student	2012	SS	Questionnaire	Sports Science	16	
3	B	Current Student	2014	SS	Questionnaire & Focus Group	Computers & Technology	16	
4	D	Current Student	2014	SS	Questionnaire & Focus Group	Computers & Technology	16	
5	E	Current Student	2012	CAT	Questionnaire	Criminology	17	
6	E	Current Student	2012	SS	Questionnaire	Humanities	17	
7	F	Current Student	2011	CAT	Questionnaire	Computer Gaming	19	
8	F	Current Student	2012	CAT	Questionnaire	Computer Gaming	18	
9	F	Current Student	2012	CAT	Questionnaire	Computer Gaming	16	
10	F	Current Student	2012	SS	Questionnaire	Engineering & Computing	14	
11	F	Current Student	2014	CAT	Questionnaire & Interview	App Design & Development	14	
12	G	Current Student	2012	CAT	Questionnaire	Popular Literature	15	
13	H	Current Student	2012	SS	Questionnaire	Humanities	17	
14	H	Current Student	2012	SS	Questionnaire & Interview	Law & Government	17	
15	H	Current Student	2013	SS	Interview only	Humanities	N/A	
16	H	Current Student	2013	CTYI	Questionnaire & Interview	Novel Writing	N/A	
17	H	Current Student	2014	CAT	Questionnaire	Criminology	14	
18	H	Current Student	2014	SS	Questionnaire	Medical Science	15	
19	H	Current Student	2014	SS	Questionnaire	General Science	17	
20	H	Current Student	2014	SS	Questionnaire & Focus Group	Psychology	15	
21	H	Current Student	2014	SS	Questionnaire & Focus Group	Psychology	17	
22	H	Current Student	2014	CTYI	Questionnaire & Interview	Criminology	17	
23	I	Current Student	2011	CAT	Questionnaire	Psychology	16	
24	I	Current Student	2012	CAT	Questionnaire	Criminology	16	
25	I	Current Student	2014	CAT	Questionnaire	Behavioural Psychology	16	
26	I	Current Student	2014	SS	Questionnaire	Medical Science	14	
27	J	Current Student	2012	SS	Questionnaire	Engineering & Computing	15	
28	J	Current Student	2013	SS	Questionnaire & Interview	Nursing	13	
29	J	Current Student	2014	SS	Questionnaire	General Science	13	
30	J	Current Student	2014	SS	Questionnaire	Medical Science	14	

Appendix C

Participant ID	School ID	Participant Type	Year	Programme	Research Tool	Subject	Age	FG no. (Parents Only)
31	K	Current Student	2011	CTYI	Questionnaire	Various subjects	20	
32	K	Current Student	2011	SS	Questionnaire	Science & Health	19	
33	K	Current Student	2011	SS	Questionnaire	Business	19	
34	K	Current Student	2012	CAT	Questionnaire	Criminology	15	
35	K	Current Student	2012	CAT	Questionnaire	Computer Gaming	14	
36	K	Current Student	2012	CAT	Questionnaire	Computer Gaming	14	
37	K	Current Student	2014	CAT	Questionnaire	Criminology	13	
38	K	Current Student	2014	CAT	Questionnaire	App Design & Development	14	
39	K	Current Student	2014	CAT	Questionnaire	Behavioural Psychology	15	
40	K	Current Student	2014	CTYI	Questionnaire	Film Studies	13	
41	K	Current Student	2014	CTYI	Questionnaire	Behavioural Psychology	15	
42	K	Current Student	2014	CTYI	Questionnaire & Interview	Architecture	14	
43	M	Current Student	2011	CTYI	Questionnaire	Behavioural Psychology	16	
44	M	Current Student	2011	SS	Questionnaire	Humanities	16	
45	M	Current Student	2011	CTYI	Questionnaire	Philosophy	18	
46	M	Current Student	2012	CAT	Questionnaire	Medicine	15	
47	M	Current Student	2012	SS	Questionnaire	Sports Science	15	
48	M	Current Student	2012	SS	Questionnaire	Science & Health	15	
49	M	Current Student	2014	SS	Questionnaire	Computers & Technology	14	
50	M	Current Student	2014	SS	Questionnaire	General Science	13	
51	M	Current Student	2014	SS	Questionnaire & Focus Group	Computers & Technology	15	
52	N	Current Student	2011	CAT	Questionnaire	Veterinary Science	17	
53	N	Current Student	2011	CAT&SS	Questionnaire	Various subjects	19	
54	N	Current Student	2012	CAT	Questionnaire	Criminology	17	
55	N	Current Student	2014	CTYI	Questionnaire	Veterinary Science	15	
56	N	Current Student	2014	CTYI	Questionnaire	Behavioural Psychology	15	
57	P	Current Student	2011	CAT	Questionnaire	Various subjects	16	
58	P	Current Student	2014	SS	Questionnaire	Computers & Technology	13	
59	Q	Current Student	2012	CAT	Questionnaire	Engineering	15	
60	Q	Current Student	2014	CAT	Questionnaire	Criminology	15	

Appendix C

Participant ID	School ID	Participant Type	Year	Programme	Research Tool	Subject	Age	FG no. (Parents Only)
61	R	Current Student	2012	CAT	Questionnaire	Computer Gaming	15	
62	R	Current Student	2012	SS	Questionnaire	Science & Health	15	
63	R	Current Student	2013	SS	Interview only	Business	13	
64	R	Current Student	2013	SS	Questionnaire & Interview	Humanities	14	
65	R	Current Student	2014	SS	Questionnaire	Psychology	15	
66	S	Current Student	2011	CAT	Questionnaire	Computer Gaming	17	
67	S	Current Student	2011	CTYI	Questionnaire	Journalism	17	
68	S	Current Student	2012	CAT	Questionnaire	Engineering	16	
69	S	Current Student	2012	CAT	Questionnaire & Interview	Engineering	16	
70	S	Current Student	2013	CAT	Questionnaire & Interview	Medicine	17	
71	S	Current Student	2013	CAT	Questionnaire & Interview	Medicine	17	
72	S	Current Student	2013	CTYI	Questionnaire & Interview	Social Psychology	13	
73	S	Current Student	2014	CAT	Questionnaire	Medicine	13	
74	S	Current Student	2014	CAT	Questionnaire & Interview	App Design & Development	14	
75	S	Current Student	2014	CTYI	Questionnaire & Interview	Architecture	16	
76	S	Current Student	2014	CTYI	Questionnaire & Interview	Criminology	14	
77	T	Current Student	2011	CAT	Questionnaire	Veterinary Science	16	
78	T	Current Student	2011	CAT	Questionnaire	Write, Act, Perform	17	
79	T	Current Student	2011	SS	Questionnaire	Humanities	15	
80	T	Current Student	2012	CAT	Questionnaire & Interview	Criminology	18	
81	U	Current Student	2011	SS	Questionnaire	Science & Health	17	
82	W	Current Student	2011	CTYI	Questionnaire	Medicine	18	
83	W	Current Student	2011	CTYI	Questionnaire	Biotechnology	15	
84	W	Current Student	2011	SS	Questionnaire	Engineering & Computing	17	
85	W	Current Student	2011	SS	Questionnaire	Business	17	
86	W	Current Student	2012	SS	Questionnaire	Humanities	17	
87	W	Current Student	2012	SS	Questionnaire	Business	17	
88	W	Current Student	2012	SS	Questionnaire	Science & Health	17	
89	W	Current Student	2012	SS	Questionnaire & Interview	Humanities	18	
90	W	Current Student	2012	SS	Questionnaire & Interview	Business	17	

Appendix C

Participant ID	School ID	Participant Type	Year	Programme	Research Tool	Subject	Age	FG no. (Parents Only)
91	X	Current Student	2011	CTYI	Questionnaire	Japanese	17	
92	X	Current Student	2012	CAT	Questionnaire	Criminology	16	
93	X	Current Student	2012	CAT	Questionnaire	Criminology	17	
94	Y	Current Student	2014	CAT	Questionnaire	Criminology	14	
95	Y	Current Student	2014	CAT	Questionnaire	App Design & Development	13	
96	Y	Current Student	2014	CAT	Questionnaire	App Design & Development	13	
97	Y	Current Student	2014	SS	Questionnaire	General Science	15	
98	Y	Current Student	2014	CAT	Questionnaire	Criminology	13	
99	Y	Current Student	2014	CAT	Questionnaire	Medicine	13	
100	A	GC	2013	N/A	Questionnaire			
101	B	GC	2011	N/A	Questionnaire			
102	C	GC	2013	N/A	Questionnaire			
103	H	GC	2013	N/A	Interview only			
104	K	GC	2011	N/A	Questionnaire			
105	L	GC	2013	N/A	Questionnaire			
106	M	GC	2011	N/A	Questionnaire			
107	N	GC	2011	N/A	Questionnaire			
108	P	GC	2013	N/A	Questionnaire			
109	Q	GC	2013	N/A	Questionnaire			
110	R	GC	2011	N/A	Questionnaire			
111	R	GC	2013	N/A	Questionnaire & Interview			
112	S	GC	2013	N/A	Questionnaire			
113	S	GC	2013	N/A	Questionnaire & Interview			
114	U	GC	2013	N/A	Questionnaire			
115	W	GC	2011	N/A	Questionnaire			
116	W	GC	2013	N/A	Questionnaire			
P117	B	Parent	2014	SS	Focus Group	General Science		(II)
118	E	Parent	2014	CTYI	Focus Group	Criminology		(III)
119	F	Parent	2014	CAT	Focus Group	App Design & Development		(IV)
120	H	Parent	2014	CTYI	Focus Group	Computers Gaming		(III)

Appendix C

Participant ID	School ID	Participant Type	Year	Programme	Research Tool	Subject	Age	FG no. (Parents Only)
121	I	Parent	2013	SS	Focus Group	N/A		(I)
122	I	Parent	2014	CAT	Focus Group	Behavioural Psychology		(IV)
123	K	Parent	2014	CTYI	Focus Group	Film Studies		(II)
124	M	Parent	2014	CAT	Focus Group	Cutting Edge Science		(II)
125	N	Parent	2014	CTYI	Focus Group	Behavioural Psychology		(II)
126	S	Parent	2013	CAT	Focus Group	N/A		(I)
127	S	Parent	2014	CAT	Focus Group	Medicine		(II)
128	S	Parent	2014	CTYI	Focus Group	Computers and Animation		(II)
129	S	Parent	2014	CTYI	Focus Group	Architecture S1		(III)
130	S	Parent	2014	CTYI	Focus Group	Criminology		(III)
131	S	Parent	2014	CAT	Focus Group	App Design & Development		(IV)
132	Y	Parent	2014	CTYI	Focus Group	Forensic Archaeology		(III)
133	K	Previous Student	2013	CTYI	Questionnaire	Various Subjects	19	
134	K	Previous Student	2013	SS	Questionnaire	Science & Health	19	
135	K	Previous Student	2013	SS	Questionnaire	Science & Health	18	
136	N	Previous Student	2013	CAT&SS	Questionnaire	Various subjects	19	
137	S	Previous Student	2013	SS	Questionnaire	Science & Health	18	
138	W	Previous Student	2013	CTYI	Questionnaire	Various subjects	18	
139	X	Previous Student	2012	CAT	Questionnaire	Various Subjects	19	

Appendix D- Data Collection Instruments

Interview Guides and Questionnaires

INTERVIEW GUIDES

- **(I)** Current Students (2012, 2013 & 2014)
- **(II)** Parent Focus Groups (2013, 2014)
- **(III)** Guidance Counsellors (2014)

QUESTIONNAIRES

- (IV)** Current Students (2011, 2012, 2013, 2014)
- (V)** Previous Students (2013, 2014)
- (VI)** Guidance Counsellors (2012, 2013)

(I) CURRENT STUDENT INTERVIEW GUIDE

SUMMER 2012

First Impressions of CTYI

Where did you first hear about CTYI?

Did anyone give you support to take part?

Were your family supportive?

Were your friends supportive?

Did anyone else from your school take part? Any friends take part? (If yes) Did this affect your choice to take part?

Student Experience on the Programme

What do you think are the strengths of the programme?

Do you think there is anything that we could change/ that we could improve on?

Probe if necessary- Instructors/ TAs/ subjects/ day schedule/ making friends?

What if anything, would you change about the programme at DCU?

Did you enjoy your course?

What did you like most about the course? / dislike?

School

Thinking about your school, do you think enough attention is being given to third level opportunities? How? Do you think anything else could be done?

What do you want to do after school?

University & Higher Education

Do you want to attend university? Why/ why not?

If relevant- at this point, what would be your ideal course to study?

Career Aspirations

What would be your ideal job in the future?

Did taking part in the summer programme affect that career aspiration/choice in any way?

Moving Forward

Do you think that the programme that you did this summer will have any effect after you finish?

Would you come back to CTYI next summer? Why/ why not?

(I) CURRENT STUDENT INTERVIEW GUIDE

SUMMER 2013

Introductory Talk

Is this your first year here?

What year in school are you in?

The CTYI Experience

Are you a previous student of CTYI?

Where did you first hear about CTYI?

What course are you studying?

Was that your first choice?

What made you pick that course?

Did you have any expectations before starting the course?

What did you like or dislike about the experience of the course/ programme?

After-School

Do you have any idea about what you may like to do after school?

Do you plan on going onto third-level?

Have you any idea what course you would like to study?

DCU

How do you like DCU? Why?

Returning to CTYI

Would you come back to CTYI next summer? Why? Why not?

(I) CURRENT STUDENT INTERVIEW GUIDE

SUMMER 2014

Introductory Talk

Is this your first year here?

What year in school are you in?

How did you find out about CTYI?

Were your parents supportive of you taking part?

Student Outcomes

What do you think the benefits are for taking part in the programmes?

How do you benefit in taking part in the programmes?

Do you see any drawbacks in taking part?

Academic

What subject are you studying?

Do you like it?

What do you like about it?

What do you dislike about it?

Higher Education

What would you like to do after school?

Is this subject linked to a college course after school?

What do you think about DCU?

Do you think higher education and university is important?

Social

Have you made friends on the programme?

Do you think the friends you have made here differ from school?

School

What school are you in?

Do you like school?

What do you like about school?

What do you dislike about school?

Do you tell your friends about taking part in the programme? Why? Why not?

What is their reaction?

Would they ever say anything? What do they say?

Is anyone supportive in school about taking part in the programme?

Return to CTYI

Why would you like to return to CTYI?

What makes it worthwhile to return? (or if relevant, why wouldn't you return?)

Have you had a favourite part about your experience so far?

Appendix D

(II) PARENTS

SUMMER 2013 & 2014

Background Information

Introduce yourself

Child's name

Child's school

Child's year in school

Introductory Questions

How did you first hear about CTYI?

How did you first hear of the assessment?

What were your initial thoughts about CTYI?

Did you have any concerns?

If relevant: link to school- providing information

(Did you inform the school that you were sending your child for the assessment?)

Were the school supportive?

Did they provide you with enough information?

Does your child like school?

What does your child like about school?

What does your child dislike about school?

Expectations and Anticipations

Did your child enjoy their summer experience?

Did they have any expectations before taking part last year? If yes, what were they?

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Did they have any concerns before taking part last year? If yes, what were they?

Student Experience on the Programme

What did they like about it?

What did they dislike about it?

Is your child excited to take part in the programme this year? If so, why?

What makes them excited to return to CTYI?

How did they go about choosing their course?

Parents Perspectives

In what way do you think these courses are beneficial?

Do you think there are any drawbacks for students undertaking these courses?

Before today, had you been to DCU before? What do you think of the campus?

Link to Higher Education

Have they spoken about what they would like to do after school?

Do you think that enough emphasis in been placed in the school as to the importance of higher education?

If not already stated before, do you think higher education is important?

(III) GUIDANCE COUNSELLOR INTERVIEW GUIDE

2013-2014

Introductory Questions

How long have you been working in the school for?

Did you nominate students for the CTYI Talent Search this year? If yes, how many students?

Have you nominated students for the CTYI Talent Search in previous years? If yes, which years?

If relevant: Why haven't you nominated students to take part in a summer programme with CTYI?

Do you know how students were identified by their teachers to take part in the Talent Search?

Thoughts about CTYI

Where did you first hear about CTYI?

What do you think are the benefits to students taking part in a summer programme at CTYI?

What are the drawbacks to students taking part in a summer programme at CTYI?

Did the students have any expectations or concerns in relation to:

- Taking part in the assessment?
- Taking part in the programme?
- (If yes, how did you address these concerns?)
- Feedback about CTYI & the programme

Student Feedback about their Experience

Did students talk about to **you OR other students** when they came back? & what did they say?

-after the assessment

-came back after the summer?

Did you notice any changes with them after he/she/they came back after the summer or did they mention anything about the experience?

Link to Parents

Do you find that parents are supportive of the CTYI courses?

Do you have much feedback from them about it?

Third-Level

Do you think that the CTYI courses can impact on student's decisions to attend third-level/university?

What else do you think could be done to increase participation to university of students from your school?

Anything else?

Any other comments or questions?

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(IV) CURRENT STUDENT QUESTIONNAIRE

2011 (SENT IN MAY 2012)

Name: _____

Date of birth ___/___/_____

School name: _____

Year in school (2011/2012) _____

Name of course studied in CTYI: _____

1. In general, do you like school?

Yes

No

2. What in particular, do you like about school?

3. What in particular do you dislike about school?

4. In your school, do you think that enough attention is given to the possibilities of further/ higher education? Explain your answer fully

5. Did taking part in a summer programmes in DCU last summer have any effect on your school experience this year?

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Yes

No

If so, how?

6. Where did you first hear about CTYI?

Family member(s)

Friend(s)

Internet/ Media

Parent(s)

School teacher(s)

School Principal

Other _____

7. Did anyone give you encouragement to take part this year in the programme?

Yes

No

If yes, who?

Family member(s)

Friend(s)

Parent(s)

School teacher(s)

School Principal

Other _____

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8. How much do you agree/ disagree with the following statements?

My parents wanted me to undertake a course

Agree strongly Agree Neutral Disagree Disagree strongly

There is a good range of courses on offer

Agree strongly Agree Neutral Disagree Disagree Strongly

I am interested in the subject area

Agree strongly Agree Neutral Disagree Disagree strongly

I was interested in spending time in a university setting

Agree strongly Agree Neutral Disagree Disagree Strongly

I thought it would be a good way to meet similar minded people

Agree strongly Agree Neutral Disagree Disagree Strongly

I made more friends than I thought I would

Agree strongly Agree Neutral Disagree Disagree Strongly

9. Did you have any expectations before starting the programme?

Yes

No

If yes, what were they?

10. Did you enjoy the overall experience of the programme?

Yes

No

11. What do you think were the strengths of the programme?

12. What do you think were the weaknesses?

13. How much do you agree/disagree with the following statements?

My expectations were met by undertaking this programme

Agree strongly Agree Neutral Disagree Disagree
Strongly

I really enjoyed my course

Agree strongly Agree Neutral Disagree Disagree
Strongly

The social side of the programme is just as important as the academic side

Agree strongly Agree Neutral Disagree Disagree
Strongly

There were a lot of similar minded people on my programme

Agree strongly Agree Neutral Disagree Disagree
Strongly

By spending time in a university setting, it made me think about further education
after school

Agree strongly Agree Neutral Disagree Disagree
Strongly

I think gaining a third-level qualification after school is important

Agree strongly Agree Neutral Disagree Disagree
Strongly

14. Do you plan to go to third-level after school?

Yes

No

If yes, which of the following qualifications would you hope to achieve?

Post- Leaving Certificate course (PLC)

Higher Certificate

Ordinary Bachelor's Degree

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Higher Bachelor's Degree

Postgraduate Diploma/ Masters

Doctorate

Don't know yet

15. In which of the below sectors, could you see yourself working in after school/ university?

(Tick all that apply)

Administration

Architecture/ Engineering

Business (includes: Accountancy, Banking, Finance, HR, Management, Marketing)

Education/ Training

IT (includes: IT Support, Programming, Web Design)

Legal

Media

Medical Professions/ Healthcare

Not-for-Profit Organisations/ Charities/ Social

Science/ Pharmaceuticals/ Veterinary Science

Service (Childcare, Hospitality/ Retail/ Tourism)

Trades (includes: Building, Carpentry, Electrician, Plumbing)

Other _____

16. In which of the below sectors, could you see yourself **MOST LIKELY** working in after school/ university? (tick only one box)

Administration

Architecture/ Engineering

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Business (includes: Accountancy, Banking, Finance, HR, Management, Marketing)

Education/ Training

IT (includes: IT Support, Programming, Web Design)

Legal

Medical Professions/ Healthcare

Not-for-Profit Organisations/ Charities/ Social

Science/ Pharmaceuticals/ Veterinary Science

Service (Childcare, Hospitality/ Retail/ Tourism)

Trades (includes: Building, Carpentry, Electrician, Plumbing)

Other _____

17. Within this sector, what do you imagine your ideal job title to be?

18. Do you think by taking part in a summer programme at CTYI that your career aspirations have changed?

Yes

No

If yes, how?

19. Do you plan on taking part in a summer programme at DCU this summer?

Yes

No

Appendix D

20. Why would/ wouldn't you go back to DCU this summer? (tick all that apply?)

I would like to do another course

I want to see the friends I made last year

I want to meet similar minded people

It was fun

There are no other courses which interest me

I didn't enjoy the experience

It was too expensive

I have other things planned for my summer

Other _____

Any other comments

(V) CURRENT STUDENT QUESTIONNAIRE

SUMMER 2012

Name: _____

Date of birth ___/___/_____

School name: _____

Year in school (2012/2013) _____

Name of course studied in DCU _____

1. Before this summer, had you been to DCU to take part in a summer programme?

Yes No

2. Where did you first hear about CTYI?

Family member(s)

Friend(s)

Internet/ Media

Parent(s)

School teacher(s)

School Principal

Other _____

3. Did anyone give you encouragement to take part this year in the programme?

Yes No

If yes, who?

Family member(s)

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Friend(s)

Parent(s)

School teacher(s)

School Principal

Other _____

4. How much do you agree or disagree with the following statements?

My parents wanted me to undertake a course

Agree strongly Agree Neutral Disagree
Disagree Strongly

There is a good range of courses on offer

Agree strongly Agree Neutral Disagree
Disagree Strongly

I am interested in the subject area

Agree strongly Agree Neutral Disagree
Disagree Strongly

I was interested in spending time in a university setting

Agree strongly Agree Neutral Disagree
Disagree Strongly

I thought it would be a good way to meet similar minded people

Agree strongly Agree Neutral Disagree
Disagree Strongly

Appendix D

I made more friends than I thought I would

Agree strongly Agree Neutral Disagree
Disagree Strongly

5. Did you have any expectations before starting this programme this year?

Yes No

If yes, what were they?

6. Did you enjoy the overall experience of the programme?

Yes No

7. What do you think were the strengths of the programme?

8. What do you think were the weaknesses of the programme?

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9. How much do you agree or disagree with the following statements?

My instructor furthered my interest in the subject

Agree strongly Agree Neutral Disagree
Disagree Strongly

My expectations were met by undertaking this programme

Agree strongly Agree Neutral Disagree
Disagree Strongly

I really enjoyed my course

Agree strongly Agree Neutral Disagree
Disagree Strongly

The social side of the programme is just as important as the academic side

Agree strongly Agree Neutral Disagree
Disagree Strongly

There are a lot of similar minded people on my programme

Agree strongly Agree Neutral Disagree
Disagree Strongly

By spending a time in a university setting it is making me think about further education

Agree strongly Agree Neutral Disagree
Disagree Strongly

I think gaining a third level qualification after school is important

Agree strongly Agree Neutral Disagree
Disagree Strongly

Appendix D

10. Do you plan to go onto third level after school?

Yes No

If yes, which of the following third level qualifications would you hope to achieve?

Post- Leaving Certificate course (PLC)

Higher Certificate

Ordinary Bachelor's Degree

Higher Bachelor's Degree

Postgraduate Diploma/ Masters

Doctorate

Don't know yet

11. In which of the below sectors, could you see yourself working in after school/ university? (Tick all that apply)

Administration

Architecture/ Engineering

Business (includes: Accountancy, Banking, Finance, HR, Management, Marketing)

Education/ Training

IT (includes: IT Support, Programming, Web Design)

Legal

Media

Medical Professions/ Healthcare

Not-for-Profit Organisations/ Charities/ Social

Science/ Pharmaceuticals/ Veterinary Science

Service (Childcare, Hospitality/ Retail/ Tourism)

Appendix D

Trades (includes: Building, Carpentry, Electrician, Plumbing)

Other _____

12. In which of the below sectors, could you see yourself **MOST LIKELY** working in after school/ university? (Tick one box only)

Administration

Architecture/ Engineering

Business (includes: Accountancy, Banking, Finance, HR, Management, Marketing)

Education/ Training

IT (includes: IT Support, Programming, Web Design)

Legal

Media

Medical Professions/ Healthcare

Not-for-Profit Organisations/ Charities/ Social

Science/ Pharmaceuticals/ Veterinary Science

Service (Childcare, Hospitality/ Retail/ Tourism)

Trades (includes: Building, Carpentry, Electrician, Plumbing)

Other _____

13. Within this sector, what do you imagine your job title to be?

14. Do you think that by taking part in the programme this summer that your future career aspirations have changed?

Yes

No

Don't know

If yes, how?

15. Now thinking about your school, in general, do you like school?

Yes No

16. What, in particular, do you like about school?

18. What, in particular, do you dislike about school?

18. Do you think, in your school, enough attention is given to the possibilities of further education after school?

Yes No

If yes, how? Please give as much detail as possible

19. Next summer, would you take part in another summer course in DCU?

Appendix D

20. What would make you come back to do another programme in DCU?

21. Any other comments?

(VI) CURRENT STUDENT QUESTIONNAIRE

SUMMER 2013

1. Before this summer, had you been to DCU to take part in a summer programme?

Yes No

2. Where did you first hear about CTYI?

Family member(s)

Friend(s)

Internet/ Media

Parent(s)

School teacher(s)

School Principal

Other _____

3. Did anyone give you encouragement to take part this year in the programme?

Yes No

If yes, who?

Family member(s)

Friend(s)

Parent(s)

School teacher(s)

School Principal

Other _____

4. Did you have any expectations before starting this programme this year?

Yes No

If yes, what were they? Please give as much detail as possible

(IV) CURRENT STUDENT QUESTIONNAIRE

SUMMER 2014

Name _____

Date of Birth ____/____/____

School Name: _____

Going into: _____ year (school year 2014/2015)

Name of course studied: _____

Name of Programme:

CTYI

CAT

Summer Scholars

Is this your first course at CTYI?

Yes

No

If yes, why did you want to come to CTYI this summer? Please give as much detail as possible

For returning students only- Did you talk about your CTYI experience after returning to school with anyone (e.g. teachers, friends, classmates?) If yes, what feedback did you give?

Appendix D

Where did you first hear about CTYI?

Parent(s)

Family members (excludes parents)

Internet/Media

Friend(s)

Guidance Counsellor

School Principal

Other _____

Who gave you encouragement to take part in the programme? Please tick all that apply

Parent(s)

Family Members (excludes parents)

Friend(s)

Guidance Counsellor

School Principal

School Teacher(s)

Other _____

What do you think are the benefits to taking part in the programme? Please explain your answer fully

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Do you see any negatives in taking part in the programme? Please explain your answer fully

Do you plan to go to third-level after school?

Yes

No

Maybe

If yes, which of the following third level qualifications would you hope to achieve?

Post- Leaving Certificate course (PLC)

Higher Certificate

Higher Diploma

Higher Bachelor's Degree

Postgraduate Diploma/ Masters

Doctorate

Don't know yet

What would be your ideal course to study?

Where would you like to study? Name of college/university _____

Appendix D

In which field would you like most to study in?

Administration

Architecture/ Engineering

Business (includes: Accountancy, Banking, Finance, HR, Management, Marketing)

Education/ Training

IT (includes: IT Support, Programming, Web Design)

Legal

Media

Medical Professions/ Healthcare

Not-for-Profit Organisations/ Charities/ Social

Science/ Pharmaceuticals/ Veterinary Science

Service (Childcare, Hospitality/ Retail/ Tourism)

Trades (includes: Building, Carpentry, Electrician, Plumbing)

Other _____

What would be your 'dream job'?

Do you think that by taking part in the programme this summer that your future career aspirations have changed?

Yes

No

Don't know

If yes, how? Please explain your answer fully!

Appendix D

Having taken part in a CTYI summer programme, in your case, do you think any of the following are true? Please tick any which you think are **true**.

Increased level of confidence in your academic ability

Heightened interest in the area you studied

Increased level of ambition

Improved social skills

Increased level of self-confidence

Heightened interest in further study/ attending university after school

Would you recommend CTYI to other students?

Yes

No

Maybe

Please explain your answer fully!

Appendix D

If you could describe your CTYI experience in five words, what would they be?

Would you come back to CTYI next summer?

Yes

No

Maybe

If yes, why would you want to come back?

(V) PREVIOUS STUDENT QUESTIONNAIRE

AUTUMN 2013 & 2014

Name _____

Date of Birth ___/___/_____

Age _____

School Name Which You Attended _____

Year(s) participated in older student CTYI (includes CTYI, CAT, & Summer Scholars) programme(s), please tick where relevant:

2010

2011

2012

2013

What programme did you take part in, please tick where relevant:

CTYI (Session 1 or 2) Center for Academic Talent (CAT) Summer Scholars

Can't remember

?

In CTYI, what subject(s) did you study?

Now that you are finished school, what are you currently doing?

Studying full-time at a third-level institution

Studying part-time at a third-level institution while working

Studying (or studied) a Post-Leaving Certificate course (PLC)

Working in the family business

Appendix D

Completing an apprenticeship

Working in a full-time job

Working in a part-time job

Unemployed/ Looking for work

Other, please be specific: _____

Who supported your participation in the CTYI programme?

Parent(s)

Other family members (excluding parents)

Friend(s) in school

Friend(s) from CTYI? (for students who took part in the courses in CTYI for more than one summer)

School (includes principal, vice principal, guidance counsellor, and teachers)

Other _____

Do you think your experience of CTYI was academically valuable? If yes, how?

Do you think that taking part in a programme impacted you when you returned to school?

Yes

No

If yes, how?

Did you talk about your CTYI experience after returning to school with anyone (e.g. teachers, friends, classmates?)

Yes

No

Appendix D

Please explain your answer:

Do you think that you benefited from taking part in the courses at CTYI?

Yes

No

Not sure

Please explain your answer fully:

Is there anything that you disliked/or would have changed about your experience in CTYI?

Did you recommend CTYI to other students/ friends/ family members?

Yes

No

Maybe

Please explain your answer:

Are you in regular contact with any of the friends which you made on the programme?

Yes

No

Appendix D

Having taken part in a CTYI summer programme, in your case, do you think any of the following are true?

Please tick any which you think are **true**.

Increased level of confidence in your academic ability <input type="checkbox"/>
Heightened interest in the area you studied <input type="checkbox"/>
Increased level of ambition <input type="checkbox"/>
Improved social skills <input type="checkbox"/>
Increased level of self-confidence <input type="checkbox"/>
Heightened interest in further study/ attending university after school <input type="checkbox"/>

Since taking part in the programme, have you done any of the following? Please tick any which you think are **true**.

Spoke about the programme to your friends (in-or-outside of school) <input type="checkbox"/>
Kept in touch with friends you made at CTYI <input type="checkbox"/>
Listed the CTYI programme on your CV <input type="checkbox"/>
Spoke about CTYI in a job interview <input type="checkbox"/>

Appendix D

THIS SECTION IS FOR STUDENTS WHO ENTERED THIRD LEVEL AFTER SCHOOL ONLY.

What is the general field that you are studying in?

Education	<input type="checkbox"/>	Engineering/ Manufacturing & Construction	<input type="checkbox"/>
Humanities & Art	<input type="checkbox"/>	Agriculture/ Veterinary	<input type="checkbox"/>
Social Science	<input type="checkbox"/>	Health/ Welfare	<input type="checkbox"/>
Business	<input type="checkbox"/>	Sport	<input type="checkbox"/>
Law	<input type="checkbox"/>	Catering	<input type="checkbox"/>
Science	<input type="checkbox"/>	Services	<input type="checkbox"/>
Maths/ Computer/ Computer Science	<input type="checkbox"/>	Other (please state) _____	<input type="checkbox"/>

What is the name of the college/ university that you are currently studying in?

What is the name of the course that you are studying?

What would be your 'dream job'? _____

Appendix D

Do you think that your experience in CTYI influenced your third-level course choice?

Yes

No

Please explain your answer:

Do you have any additional comments to make about your CTYI experience?

(VI) GUIDANCE COUNSELLOR QUESTIONNAIRE

2012

Name _____

Name of school _____

Position in school _____

1. How long have you been working in the school for?

- less than a year one to five years five to ten years ten years
or more

2. Did you nominate students for CTYI's Talent Search assessment this year?

- Yes No

3. Other than this year, have you nominated students in your school for CTYI's Talent Search?

- Yes No Can't remember

4. If relevant, please name the students that you nominated for CTYI's Talent Search this year?

—

5. Which of the following would have contributed you putting forward students for the Talent Search this year?

Behavioural checklist

Through the administration of a standardised aptitude test

Nomination by a parent/ caregiver/ peer/ self-recommendation

Observation and anecdotal evidence

Academic grades

Evaluation of coursework/projects/ high standard of assignments

Other (please state) _____

6. What do you think are the benefits for a student participating in summer courses in Dublin City University? Please give as much detail as possible.

7. Do you think there are any drawbacks of a student participating in summer courses in Dublin City University? Please give as much detail as possible.

8. Is there a full-time career guidance counsellor in your school?

Yes

No

Which of the below does your school offer?

Once a week career guidance class to 5th and 6th years

Once a week career guidance to all years 1st-6th year

Career evenings

Guest speakers on career opportunities

Guest speakers from third-level institutions

Other (If relevant, please explain)

Appendix D

9. What other elements do you think could be implemented in your school to increase participation of students into study at third-level? Please give as much detail as possible:

We may be looking to further hear and discuss some of the issues raised throughout this survey.

Would you be willing to discuss your opinions in an interview in further research at a later date?

Yes

No

Maybe

If you are happy to be contacted again, to take part in future research, please complete the below:

*Phone number** _____

*Email address** _____

**These shall be used to contact you with more information about future research plans*

Do you have any other comments?

(VI) GUIDANCE COUNSELLOR QUESTIONNAIRE

2013

Name _____

Name of school _____

Position in school _____

1. How long have you been working in the school for?

- less than a year one to five years five to ten years ten years or more

2. Did you nominate students for CTYI's Talent Search assessment this year?

- Yes No

3. Other than this year, have you previously nominated students in your school for CTYI's Talent Search?

- Yes No Can't remember

If yes, what year(s) ? _____

4. Are you aware of any students that completed a summer programme with CTYI and have progressed onto 3rd level?

- Yes No Don't Know

If yes, how many _____

Appendix D

5. If relevant, please name the students that you nominated for CTYI's Talent Search this year?

6. Which of the following would have contributed you putting forward students for the Talent Search this year?

Behavioural checklist

Through the administration of a standardised aptitude test

Nomination by a parent/ caregiver/ peer/ self-recommendation

Observation and anecdotal evidence

Academic grades

Evaluation of coursework/projects/ high standard of assignments

Other (please state) _____

7. Did you notice any positive changes from any of the below options from student participating in summer courses in CTYI? Please tick any that apply.

Behaviour

Attendance

Confidence

Motivation

Raising aspirations

Effect on other students'

Academic attainment

Other _____

Any other comments, if yes, please give as much detail as possible

8. Do you think there are any drawbacks of a student participating in summer courses in Dublin City University? Please give as much detail as possible:

9. What other current pre-entry supports are your students engaged in? Please tick any that apply:

Academic tuition –(e.g. leaving cert maths classes, leaving cert oral Irish classes, Junior Cert Accountancy Classes, Junior Cert maths revision classes)

Maths programme – maths quiz, fun workshop, murder mystery maths

CITI Career – Guiding your way forward Programme

Discover DCU

YSI workshops

Achievement Awards

Attendance Awards

Take 5 Programme

12. Is there a full-time career guidance counsellor in your school?

Yes No

Which of the below does your school offer?

Once a week career guidance class to 5th and 6th years

Once a week career guidance to all years 1st-6th year

Career evenings

Guest speakers on career opportunities

Guest speakers from third-level institutions


Other (If relevant, please explain)

13. What other interventions do you think could be implemented in your school to increase participation of students at 3rd level? Please give as much detail as possible.

Appendix E- Coding the Case (Data Analysis)

2011	2012	2013	2014
<p>QU (CS) Future Goals, Career, Positive Experience, Financial- Scholarship, School, Social Side of the Prog, School, Increase in confidence after programme, Higher career aspirations after the programme, other students "bonkers", Change in career choice- VET Science, the DCU experience</p>	<p>QU (CS) 97% of students want to attend university. PhD & Masters- high. Range of responses regarding encouragement for taking part from parents & schools, not from friends. Mixture in responses about enough career guidance been given in schools</p>	<p>QU (CS) Developed from 2012 responses. First hearing about CTYI- schools authorities. Parents, Family & Schools giving encouragement. Probing about expectations before the prog- different expectations for returning & new students</p>	<p>QU (CS) For returning students: What feedback did you give other students in school? Positive and enjoyable experience. Put CTYI on CV. Opportunity to study subjects not in school. Meet new friends. Feeling of confidence in academic ability. Heightened interest in HE after school. Returning to see friends- pull factor to come back</p>
CODES	<p>IW (CS) Specific subjects mentioned in CTYI. Positive outlook in school, though not challenged at time. Probing in relation to who gives encouragement. Strengths and weaknesses of the programme explored</p>	<p>IW & FG (CS) Courses give idea of what its like to be in college. Different subjects than offered in school. Most want to go onto university after school though unsure of what to do. The courses give an idea of what might be interesting. Friends a big part of the experience. Often not telling friends in school about taking part- negative comments. Social time important</p>	
<p>QU= Questionnaire FC= Focus Group IW= Interview</p> <p>CS= Current Students PS= Previous Students PR= Parents GC= Guidance Counsellors</p>	<p>QU (GC) Many GC's sending students for TS, Identification criteria- emphasis on tests & anecdotal evidence. Benefits of CTYI participation- creating a link to the HE environment where no one in the family has previously gone</p>	<p>QU & IW (GC) Probing questions in relation to identification processes. The benefits & drawbacks of participation. Findings: Benefits= Increase confidence, real experience with HE environment, opportunity to take part in academic courses. Academic Challenge. Negatives= None or asking for financial contribution to programme</p>	

Appendix E (cont.) - Coding the Case (Data Analysis)

 <p>'Aiming High' Case</p> <ul style="list-style-type: none"> • Academic Benefits • Social Benefits • Personal Benefits • Negative Aspects 	FC (PR)	
	<p><i>Exploratory-</i> Mainly dealing with financial and first impressions- Concern about the financial cost of the prog's. GC's & Principal providing the info about the prog & clarification of any questions. Feel that the prog's have a positive effect of academic development</p>	<p>More discussion into the benefits of the courses: give their children the opportunity to find out about HE environment themselves. Make friends outside school. Can be themselves. Confidence. Concern about financial cost of the prog's with scholarship. Awards ceremonies- positive aspect of the programme.</p>
	QU (PS)	
	<p>Many respondents in HE- subjects often resemble subject studied at CTYI. Positive comments about CTYI. More than just academic experience. Making & staying friends with other students. Recommending CTYI to other younger students. Relaying positive experience to peers</p>	

Appendix F- Schools Data Collection

School ID	QA 2012	QA 2013	Interview 2013/2014
A		Yes	
B	Yes		
C	Yes		
D			
E			
F			
G			
H			Yes
I			
J			
K	Yes	Yes	
L		Yes	
M	Yes		
N	Yes		
O			
P		Yes	
Q		Yes	
R	Yes	Yes	Yes
S		Yes	Yes
T			
U		Yes	
V			
W	Yes	Yes	
X			
Y			

Appendix G- DCU Campus Map



- | | | | | | | | |
|--------------------------|-----------------------------|----------------------------|----------------------------|-----------------|-----------|-------------|------------------|
| U Accommodation | W College Park Residence | VA Postgraduate Residences | GA Reception (Mac Cormac) | PR Restaurant | Bus Stop | ATM | Bicycle Sheds |
| X Albert College | V2 Hamstead Residences | VB Postgraduate Residences | HA Nursing | SC Sports Club | Book Shop | Information | Football Pitches |
| W College Park Residence | N The Healthy Living Centre | VI Larkfield Residences | CA NRF | Stokes Building | Barrier | Car Park | Café |
| R Crèche | Z The Helix | LA Larkin Lecture Theatre | P Pavillion | | | | |
| Q DCU Business School | C Henry Grattan | X Lonsdale Buildings | VA Postgraduate Residences | | | | |
| E Estates Office | B Invent | M Marconi Building | V2 Postgraduate Residences | | | | |
| | | N Multi-Storey Car Park | CA Reception (Mac Cormac) | | | | |

Appendix H- Breakdown of the subjects at CTYI

A Sample of the Summer Programme Subjects 2011-2014			
	CTYI	CAT	Summer Scholars
2011	Game Theory, Medicine, War & Conflict Studies, Forensic Archaeology, Journalism, Veterinary Science	Write, Act, Perform, Veterinary Science, Computer Gaming, Psychology, Medicine	Business, Engineering & Computing, Science & Health, Humanities, Law & Government
2012	Game Theory, Medicine, Business & Innovation, Economics & Politics, Biotechnology, Forensic Archaeology, Law, Computers & Animation	Engineering, Medicine, Computer Gaming, Criminology, Psychology	Business, Engineering & Computing, Science & Health, Humanities, Law & Government, Sports Science
2013	Japanese Language & Culture, Business & Innovation, Cyber Psychology, Economics & Politics, Multimedia, Popular Fiction, Cutting Edge Science	Criminology, Journalism, Medicine, Social Psychology, Computers & Animation, Engineering,	Business, Engineering & Computing, Nursing, Science & Health, Humanities, Law & Government
2014	App Design & Development, Biotechnology, Computer Gaming, Film Studies, Game Theory, Modern Maths, Music Production, Forensic Archaeology, War & Conflict Studies	App Design & Development Behavioural Psychology, Criminology, Cutting Edge Science, Engineering, Medicine, Popular Fiction	Computers & Technology, Engineering, General Science, Law, Medical Science, Psychology

Appendix I- A Sample of the Recreational Activities at CTYI

Football

Music Appreciation

Arts and Crafts

Rounders

Playground Games

Find your spirit & meditation

Debating

Speed Friending

Tag Rugby

Tea-Tasting

