In Search of Excellence: Perceived effects of special classes for gifted students in Ireland from the perspective of participating students and their parents.

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

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Dedication

This thesis is dedicated in memory of my Mam and Dad and my sister Caitriona. I think you all would have been proud.

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Thesis Abstract

Colm O'Reilly (Dublin City University)

In Search of Excellence: Perceived effects of special classes for gifted students in Ireland from the perspective of participating students and their parents.

This thesis focuses on high ability students and the effects of Saturday and summer courses on their academic and social development. These students who have been identified through assessment are in the top 5% of the population academically. After qualifying from the assessment they are invited to participate in courses run by the Irish Centre for Talented Youth (CTYI) at Dublin City University and other colleges around the country.

This study looks at students who have participated on these programmes and their parents in relation to the impact of these courses on their academic and social development. Results show that participating students and their parents have a significantly higher level of academic satisfaction with classes at CTYI compared to school. Furthermore the parents and students perceive themselves to have a more positive attitude towards attending CTYI classes compared to school. Both parents and students within this study note a lack of academic challenge at school and believe that they receive little support from their classmates in relation to their ability. Parents tend to rank their children's ability as much better than their peers in all academic subjects while most of the students rank themselves as much better in selected subjects. Students and parents within the study are mostly comfortable with their academic ability although this is seen to decline slightly as the child gets older. Most of the parents and the students who have attended special classes for high ability children are somewhat uncomfortable with the term gifted to describe their ability.

Chapter 1:   Introduction

Overview

This study is designed to examine attitudes and perceptions of giftedness of students and parents who participated in a series of Saturday and Summer classes for high ability students at Dublin City University and other colleges around the country. The students in this study were aged from 8 to 16 and were identified as being in the top 5% of the population academically through an educational assessment. The courses that the students participated in were run by the Irish Centre for Talented Youth (CTYI) which is a national non profit making organisation designed to meet the needs of high ability children from all over Ireland. CTYI was established at Dublin City University in 1992, with the following aims:

- To identify through national and international talent searches pre-college children who reason extremely well mathematically and/or verbally;

- To provide talented youth both from Ireland and overseas with challenging and invigorating coursework and related educational opportunities through an annual summer programme, and on Saturday classes during the school year;

- To provide teacher training and support services to schools participating in the CTYI programme;

- To assist parents in advancing talented students by providing access to information and resources;

- To research and evaluate talent development and the effectiveness of programme models and curriculum provision.

<div align="right">(www.dcu.ie/ctyi)</div>

As part of its mission CTYI runs Saturday courses for primary school children at various centres around the country and Summer courses for secondary school

students at Dublin City University. These courses would traditionally be in non curricular subjects giving students the opportunity to study topics that they would not usually be exposed to in school. Examples of subjects on Saturday classes that primary school students in this study experienced included Forensic Science, Zoology, Science of Tomorrow, Engineering, Computer Programming, Journalism, Legal Studies and Psychology. Examples of summer course subjects that secondary school students participated in included Biomedical Diagnostics, Theoretical Physics, Criminology, Corporate Business, Social Psychology, International Relations and Writing for Life. A full list of courses and course descriptions is available in Appendix A.

Courses given would normally be in subjects that would be offered at third level and are taught by subject experts in the particular area. The teachers would usually be part time lecturers or postgraduate students from the third level institution hosting the course. In this way CTYI students have access to third level facilities and teachers who have particular knowledge in their area of interest. Typically in primary school these students have one teacher for all subject areas and have little or no opportunity to develop their knowledge in specific academic areas. While they have teachers in different subject areas at second level it is often the case that either the subject might not be challenging enough for them (see Vaughan, Feldhusen & Asher, 1999; Kulik, 2003; Moon, Feldhusen & Dillon, 1994) or in some instances the students may excel in a subject that is not offered at secondary school (see Olszewski-Kubilius, 1989; Benbow & Stanley, 1983a; Olszewski-Kubilius & Lee, 2004).

Focus of Study

The main focus of the study is to look at gifted students and their parents who attended out of school programmes for high ability students to find out if they experienced different levels of academic satisfaction at these classes compared to school. The study also looks at the attitudes of the students and parents towards attending these classes and they too would be compared to school. I wanted to discover if students were aware of their ability in relation to their peers at school and how they ranked themselves in comparison to these peers in their school subjects. I wanted to compare this with how their parents ranked them relative to their peers to discover if there were any differences in the perception of ability between parents and students. Most importantly though I wanted to discover what the students and the parents perceptions of being gifted was and whether they were comfortable with this term to describe their ability. As a practitioner and worker with gifted students for the last 17 years I wanted to complete a piece of research that would give gifted students and their parents a voice in the Irish education system. The area of gifted education is a hugely under researched area in this country and no similar piece of research on a large number of gifted students had ever been done in Ireland.

This is a large scale study involving parents and students answering specifically designed questionnaires to ascertain their perceptions of the out of school classes they had attended. It was followed up with some in-depth interviews with selected participants from the primary school students, secondary school students, primary school parents and secondary school parents who took part in Saturday and Summer classes with CTYI. As well as these personally designed measures the research would also avail of two widely used external measures, the Myers-Briggs Type Indicator

(MBTI) and the Piers Harris Children's Self-Concept scale to help me to gain a greater understanding of gifted students and their learning needs. All of this will be further discussed later in this section and will be comprehensively detailed in the Research Design section (Chapter 3).

Literature in the Area

The second chapter of this study will critically examine the literature in relation to giftedness highlighting the key contributors to the field including Stanley, Terman, Gardner, Sternberg and Renzulli. The academic structure of CTYI courses will be examined including the Optimal Match (Tangherlini and Durden, 1993) and Talent Search principles (Stanley, 1976; Stanley, 1991) which are the instructional approaches at the heart of CTYI's teaching principles. Simply put the Optimal Match states that an appropriate educational experience for a high ability student is one that challenges the individual to perform at a level just beyond his or her cognitive grasp (Redding, 1989). The Talent Search concept pioneered by Julian Stanley at Johns Hopkins University in the 1970's offers a challenging test designed for older students to bright motivated younger students as a means of identifying exceptional talent in a specific domain. In the 1990s this model was implemented in Ireland and is used as an identification procedure for CTYI programmes.

Defining giftedness is an area that seems to have little consensus in the literature. The review will examine the major contributors to this area. The early theories around giftedness from Binet and Terman will be explored moving towards the more modern theories of Sternberg and Gardner. From the literature the study will examine previous research on the effects of Saturday and Summer programmes on gifted students that have been conducted in America and Germany. This will be further

analysed in terms of academic and social effects on the participating students. The different strategies that educators use to work with gifted children will be outlined. The concepts of acceleration and enrichment will be examined in the context of the existing research. Acceleration involves moving a child through an academic programme at a faster pace than normal while enrichment allows for students to cover existing curriculum in greater breadth and depth. This is particularly important for this research as the courses at CTYI offer a level of acceleration and enrichment. The availability of special classes for high ability students both inside and outside of school will be explored and evaluated and evidence from previous research on Saturday and Summer programmes will be analysed in the context of this research. The literature around the two external measures, the MBTI and the Piers-Harris Children's Self-Concept Scale will be reviewed in the context of their relevance to studies with gifted children. This will include analysis around giftedness and self-concept and giftedness and learning styles.

Research Design

The third section will cover research design and why this study is important. The researcher believes that this study is necessary to highlight the needs of high ability students in Ireland. Currently there is no legislation in this country directly mentioning gifted children. The 1998 Education Act s.7 (1) (a) states that

'there should be made available to each person resident in the State, including a person with a disability or who has special educational needs, support services and a level and quality of education appropriate to meeting the needs and ability of that person.'   (DES,1998)

While this would seem to advocate that gifted children should be catered for in schools, to date no direct funding has been made available to allow schools to cater for high ability children. Schools are confused as to what to do with gifted children

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and without resources these students may not be catered for in school. This study will hopefully go some way towards understanding gifted children and their needs in a school context. I believe that these students are often not stretched by regular curriculum and this can lead to boredom and frustration in school. By challenging them at a level appropriate to their abilities the students can become stimulated and motivated to achieve their potential. In 2005 the Dept of Education and Science in Ireland produced a report evaluating curriculum implementation in primary schools (DES, 2005). The report stated that in almost half of the classes they found that no provision was made for different learning styles and individual needs in Mathematics. It was also reported that there was no differentiation within learning tasks for pupils of varying abilities. I believe that this can lead to much frustration for the talented student. Their minds need to be stretched. They need to be continually challenged, and should be given opportunities to work both independently and in a group.

From a methodological perspective most of the research in the area of giftedness seems to be dominated by quantitative research (see Hays, 1993; Paul & Plucker, 2004). This assumes that giftedness is something that can be measured in the form of IQ and that it is static and stable over time. In relation to giftedness one's talents and abilities are defined by standardized tests. Identification of gifted children is based on objective measures and programmes are based on a consistent set of experiences across educational settings. Borland (1990), Cross (1994) and Coleman, Sanders and Cross (1997) point out that most of the research in gifted education is in the positivist paradigm with small but slowly growing bodies of research coming from other approaches such as constructivism, critical theory and a variety of qualitative methodologies. The literature (chap 2) will show that researchers now prefer a

multidimensional approach to defining giftedness and this new approach has led to a shift in the style of research in the area with a growth of studies using qualitative methods.

Mason (2006) describes qualitative research as being grounded in a philosophical position which is broadly interpretive in the sense that it is concerned with how the social world is interpreted, understood, experienced or constituted. It is based on methods of data generation which are both flexible and sensitive to the social context in which the data is produced. It is also based on methods of analysis which involve understandings of complexity, detail and context. Within an interpretive approach researchers see people and their interpretations of their world as the primary data sources. As Blaikie (2000, p.115) puts it

"Interpretivists are concerned with understanding the social world people have produced and which they can reproduce through their continuing activities."

The interpretivist paradigm applied to giftedness sees knowledge of the world as being mediated by the signs and symbols people use to interpret the world. Knowledge is viewed as subjective and what can be learned is how others understand the world. Giftedness means different things to different people and the interpretivist researcher sees outcomes that come about as a result of dialogue among the participants and these outcomes change as time goes on. In the interpretivist mode gifted persons can be defined by all groups according to their own set of attributes. There is no universal group.

From an ontological perspective if one holds an objectivist view that gifted exists as a separate entity that can be measured by IQ testing then the epistemological

orientation that you will favour will be that of positivism. Traditionally giftedness has been researched in this form. The reasoning here is deductive and implies a testing of the theory. Recently though modern theories of giftedness have presented another ontological assumption which is that of constructivism. In this perspective giftedness exists but is dependent on the social context that it is researched. Looking at giftedness in this fashion sees multiple forms of giftedness that are developmental and process oriented and dependent on a number of factors. Researchers who perceive giftedness in this fashion are coming from an interpretivist epistemological orientation.

Interestingly the CTY model at Johns Hopkins University pioneered by Julian Stanley and used at CTYI is concerned with identifying those who exhibit exceptional reasoning in specific areas of aptitude. It promotes the idea of precocity that gifted students are those who because they can learn at a faster rate and comprehend more advanced ideas can reason like older students. It uses testing of sorts to identify these students. It does not however deny the existence of a general factor of intelligence but sees that measuring specific aptitude is a more useful method of identifying gifted children. For example you may have a gifted child with high ability in Maths but is average verbally and vice versa (Brody & Stanley, 2005).

As a researcher I had direct access to large number of students and parents who had attended classes at the Irish Centre for Talented Youth. These students had been identified for the programme through academic assessment so therefore initially the research suited a positivistic inquiry with a large questionnaire sent out to students

and parents to find out the answers to the research question. However as I read through the literature and the emerging paradigm wars in gifted research I became convinced of the importance of doing some qualitative research to build on any findings from the questionnaire study. Therefore I employed the sequential mixed methods strategy proposed by Creswell (2009) and explained in detail in the third chapter. The method involved using a large scale questionnaire and then following this up with some in depth interviews of the main participants.

Research Tools

A questionnaire was administered to parents and students at both primary and secondary school who had completed the CTYI Saturday classes or Summer courses. These were designed for students and parents to ascertain whether they had different opinions in relation to academic satisfaction with class at CTYI compared to school and in relation to their perceptions of being identified as gifted children and to their parents perception of this and to their attitudes towards academic ability and independent study. This study was used to find out the relative levels of academic satisfaction of students who participated in these courses. This was compared with the students level of academic satisfaction with their schools. The study also compared students attitudes towards attending CTYI programmes and school. Students were also asked to outline what reasons they may have had for attending CTYI courses and what achievements they may have realised as a result of attendance.

In a separate questionnaire parents were also asked similar questions in relation to how they felt about the level of academic satisfaction of the classes at CTYI for their children and also about their attitudes towards attending the CTYI programme

compared to school. Parents and students were asked to compare the level of encouragement in terms of their ability that the children received from various groups including teachers, friends and classmates. Furthermore students and parents were asked to rank themselves in comparison to their classmates in a selection of academic and non academic subjects in school. Within the questionnaire the notion of comfort with academic ability was explored along with comfort with studying independently. Finally the whole concept of giftedness was explored and students and parents were asked if they were comfortable with this term to describe high academic ability. Students and parents responses to all the questions were analysed and compared using statistical techniques. For a full copy of the questionnaires used see Appendix B.

These questionnaires were followed with a series of interviews with some primary school CTYI students, primary school CTYI parents, secondary school CTYI students and secondary school CTYI parents. These semi-structured interviews would be used to further explore the themes from the questionnaire data in a qualitative fashion.

Other Research Measures

To gain a clearer picture of the perception of giftedness two widely used measures of self-concept and learning styles were administered to students on the secondary school programme. The Myers-Briggs Type Indicator has been used extensively with gifted students to assess the psychological types on four dimensions (Hawkins, 1997; Parker & Mills, 1998; Sak, 2004). These four dimensions are extraversion and introversion; sensing and intuition; thinking and feeling; and judgment and

perception. The Piers-Harris Children's Self Concept Scale is a widely used self report instrument designed for children to assess self concept. It has been used extensively with gifted students (Lewis & Knight, 2000; Tong & Yewchuk, 1996). The scale includes a total self concept score as well as sub scores in six areas: behavioural adjustment; intellectual and school status; physical appearance and attributes; freedom from anxiety; popularity; and happiness and satisfaction. These tests were administered to secondary school students who were attending a CTYI Summer Programme. The results for these tests were collated and compared with students from non gifted samples to discover if any specific differences separated the two groups.

The use of the different measures in my research design is illustrated in the diagram below.

Questionnaire Data *Positivistic* Effects of special programmes & understanding of giftedness	Emerging Themes ⟷	Interview Data *Interpretivist* Attitudes towards special programmes & perceptions of giftedness
↑ Teaching Implications ↓		↑ Feeling about being gifted ↓
Myers – Briggs Type Indicator	⟷ How gifted students view the world	Piers Harris children's self concept scale

Results and Analysis

The fourth and fifth chapters of this thesis will document the detailed results and analysis from the various pieces of research. The research has found that students who attend out of school programmes at Dublin City University and other centres around the country generally have a high level of academic satisfaction with these courses and a positive attitude towards attending. The parents too report a high level of academic satisfaction and a positive attitude in attending special classes in their children and this is sometimes in contrast with the level of academic satisfaction with school and the attitude towards attending school. Both primary and secondary students and parents perceive both academic and social benefits from attending special classes for high ability children with students perceiving a higher level of social benefit than the parents. While both the parents and students feel that they have somewhat of a positive attitude towards attending school most of them experience a lack of academic challenge at some stage at school. In terms of ability most of the primary and secondary school students would generally rank themselves as considerably better than their peers in all academic subjects except Irish and most would rank themselves as about equal at Physical Education. The parents too rank their children as better than their peers in the academic subjects and somewhat worse at physical Education.

An interesting statistic is that the parents rank their child significantly higher in academic subjects than the children themselves. In terms of encouragements both parents and students feel they get the most level of encouragement for their academic

interests from the parents themselves. While most feel they get some encouragement from teachers over half of all the groups, primary school students and parents and secondary school students and parents believe they receive little or no support from their classmates.

In terms of comfort with ability most of the students at primary and secondary are comfortable with their ability with the primary students being significantly more comfortable. There is a slight decline in comfort with ability in the secondary school students. The parents of both groups are mostly comfortable with their child's ability with the secondary school parents more comfortable. The students at primary and secondary are not as comfortable using the term gifted to describe their ability with the secondary school students considerably more uncomfortable with this than the primary students. About half of the primary and secondary school parents are comfortable with the term gifted to describe their academic ability although the primary parents would significantly be more likely to describe their child as gifted compared to the secondary school parents. Similarly about 70% of the primary school children would describe themselves as academically gifted compared to just over 40% of the secondary school students.

From the in-depth interviews with the participants and their parents from the primary and secondary school programme some significant themes emerged. These included: attitude towards attending CTYI and reasons for attending; academic satisfaction and challenge with classes at CTYI; academic satisfaction and challenge with classes at school; ranking of ability in subjects at school; and perceptions of comfort with ability. The data from the Myers-Briggs Type Indicator revealed that high ability

students have a different way of taking in information and learning new things than their regular school counterparts. Furthermore the CTYI population is likely to have a significantly higher proportion of Introverts than the general population who have much more Extraverts. The Piers Harris Children's Self-Concept Scale results show that the high ability children have a higher academic self-concept than non gifted students. On the other hand they showed lower social self-concepts in some of the scales. All of these results are displayed in Chapter 4 of this thesis and analysed and discussed in Chapter 5.

Summary

There is a need for substantive research in the area of gifted education in Ireland. By researching parents and students who have participated in a programme for high ability children, this allows us to identify the needs of these children and what their attitude is to attending school and whether adequate provision is provided for them. With the increased demand for individualised programmes for students of special needs in this country it will be interesting to see if such provisions will be made available to gifted students. As the education system changes to cater for students of different levels of ability it is worth noting that the notion of gifted education is also evolving. Research in the area is moving from that of a quantitative nature towards more qualitative studies. The sequential mixed methods research design used for this study will be further developed in the third chapter of this thesis.

The next chapter will comprehensively examine the literature around this area with particular emphasis on special programmes for gifted students and whether these programmes have been of benefit to the students involved. One of the main questions of this research is whether the high ability students who attend special out of school

programmes at Dublin City University and other centres around the country are academically satisfied with these courses and whether they have a more positive attitude towards them than they do to attending school. In this context I will examine the literature around other special programmes for gifted students in different countries to compare the results with those of this research.

Furthermore how one defines giftedness is changing from the static 'one size fits all students' towards a more multi-dimensional approach which leads to a wider and broader definition of the topic. These new theories around giftedness question existing assumptions about how to identify students for special programmes and how to develop curriculum for these programmes. Definitions of giftedness will be analysed from a historical perspective leading to more modern theories in the field. One of the key questions of this research is how parents and students who are involved in high ability classes in Ireland understand the concept of giftedness and whether they are comfortable with the term gifted to describe their ability. By allowing the literature to guide us through existing definitions of giftedness in Ireland and internationally the research can build a framework that furthers our understanding of the area. This is achieved through the questionnaire data and the in-depth interviews with the participants on the programme at both primary and secondary level that will be detailed and discussed in the fourth and fifth chapters of this research.

Chapter 2:   Literature Review

Overview

This chapter comprehensively reviews the literature on giftedness as it relates to this particular body of research. Firstly the review will look towards a definition of giftedness and will explore how there is little common consensus amongst researchers in this area within the literature. Following on from this, early and modern theories of giftedness will be examined, including the influential work of Louis Terman, Howard Gardner, Robert Sternberg and Joe Renzulli. From there the research will examine the importance of the existing political climate and educational structure within particular countries and how this relates to policies for gifted children. Prevailing educational philosophies may influence the type of programme for gifted students that may be on offer within a particular country or even whether these programmes may be offered at all.

This review will then look at the concepts of acceleration and enrichment and how these ideas impact on gifted programmes. From here I will examine the literature on the types of programmes available to gifted children including "pull out" programmes and special out of school classes in university settings. Then the study will critically examine the Talent Search concept which is at the heart of the identification procedure used for the students in this study. The pioneering work of Julian Stanley will be explored and the use of out of level testing to identify gifted students will be reviewed. Finally this review will analyse the literature available on the Myers-Briggs Type Indicator and the Piers Harris Self Concept scale which were the two external instruments that were administered to the students who participated in the study. These instruments will be analysed in terms of their use in previous studies with

gifted students and also on the broader front of how learning styles and self-concept are important topics in the area of gifted research

What is giftedness?

The United States Department of Education or Marland Report (1972), contains a definition of giftedness that is probably the most quoted in any research into giftedness. The report declared that

gifted and talented children are those identified by professionally qualified persons, who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programmes and/or services beyond those normally provided by the regular school programme in order to realise their contribution to self and society.

Children capable of high-performance include those with demonstrated achievement and/or potential ability in any of the following areas, singularly or in combination:-

- *General Intellectual Ability*
- *Specific Academic Aptitude*
- *Creative or Productive Thinking*
- *Leadership Ability*
- *Visual and Performing Arts*
- *Psychomotor Ability*

(Marland, 1972)

The first Irish definition of giftedness as offered by the report of The Special Education Review Committee (DES 1993) owes much to Marland's definition, with each of the above categories represented, and a separate section on mechanical aptitude included.

In this context it is worth looking at this definition more closely. Firstly there is the requirement that these gifted students need to be identified by professionally qualified persons. From this definition there is a certain level of uncertainty that teachers or parents are suitable individuals to identify these students and that an independent level of assessment is required. There is also a statement that these children require a

differentiated programme beyond the school curriculum to allow them to thrive. This certainly conflicts with more traditional thinking in an Irish context that these students are catered for within a regular curriculum and these students can be challenged by regular classroom activities. Finally it contains one of the accepted definitions of a gifted child amongst researchers…*gifted children who by virtue of outstanding abilities are capable of high performance…* A general consensus amongst interested parties states that students who are gifted have the potential to perform at levels beyond what may be expected for their age. Most experts (Olszewski-Kubilius, 1989; Moon, 1995; Benbow & Stanley, 1983a; Kulik, 2003) agree that gifted children fall into the special educational needs category as they have different educational needs than that of a general population. As VanTassel-Baska ((2003, p.174) points out

"Gifted learners have different learning needs compared with typical learners. Therefore, curriculum must be adapted or designed to accommodate these needs."

The key question for teachers is how to identify these children and then most importantly what to do with them once they have been identified. While this definition is highly quoted there is little consensus among researchers about whether it is the correct definition. Within the literature there has been a difficulty with an accepted definition. Renzulli and Reis (1997) offer the following suggestion.

Gifted behaviour consists of behaviours that reflect an interaction among three basic clusters of human traits – above average ability, high levels of task commitments and high levels of creativity. Individuals capable of developing this composite set of gifted behaviours are those possessing or capable of developing this composite set of traits and applying them to any potential area of human performance.

(Renzulli and Reis 1997, p8)

There are also problems with whether giftedness applies across the board in all subjects or whether it relates to subject ability. Historically Spearman (1904) sought out empirical tests of differences between various mental tests and school performance measures. Many of these seemingly diverse tests had strong correlations. In further research (see Spearman, 1927) he extracted from arrays of test intercorrelations a factor called "g" which he identified as that universal thing possessed in varying amounts by all people that is responsible for individual differences in test scores and academic performance. Systematic differences between each test were accounted for by postulating different specific factors of intelligence, known as "*s*", which the various tests also measured. The concept that intelligence is categorised by general underlying ability and certain task-specific abilities has been developed by British researchers (see Burt, 1968). "G" became regarded as a symbol for general intelligence. Gifted students were perceived of as those who scored above average on IQ tests. Importantly this is a quantifiable measure not a qualitative one. Grouping students in special classes moving at an accelerated pace that contains more advanced and in depth material was seen as a way of utilising this model (see Feldhusen, 1991; Stanley, 1979; Olszewski-Kubilius, (2003).

Our conceptions of giftedness can vary whether we ascribe to the g factor theory of intelligence supported in the literature by Jensen (1998) and Carroll (1993) or a more domain specific orientation to intelligence as proposed by Gardner (1983) or Benbow & Stanley (1996). In a domain specific conception of intelligence, giftedness becomes the manifestation of intelligence within specific domains at very high levels (Van Tassel-Baska, 2005). Giftedness has become more culturally bound and field dependent (Csikszenthimihalyi, 2000). In this instance giftedness becomes the

manifestation of general intelligence in a specific domain of human functioning at a level significantly beyond the norm such as to show promise for original contributions to a field of endeavour. (Van Tassel-Baska, 2005). Recent reviews (Ericsson, 1996; Ericsson & Lehmann, 1996) show that extended engagement in domain related activities is necessary to attain giftedness.

Brody and Stanley (2005) define gifted students as those who exhibit exceptional reasoning ability in a specific area of aptitude, primarily math or verbal reasoning but also spatial, mechanical and other specific abilities.

Heller (1989, p.141) formulates giftedness as

"the individual cognitive and motivational potential for achieving excellent performance in one or more areas such as mathematics, languages or artistic areas".

Interestingly Heller focuses on potential rather than realized performance. Indeed Tannenbaum (1986) adds to this debate by reserving true giftedness to adulthood where talent is judged by particular achievements while children can only be described as having potential giftedness. By contrast Cross and Coleman (2005) define giftedness as an age specific term that refers to the potential of young people who are judged to have demonstrated rapid learning in relation to their peers. This judgment is made on the basis of some normative standard. Monks & Mason (2000) describe giftedness as an individual's potential for exceptional achievement.

Another consideration around giftedness is whether it is something that you have forever or is it something that without constant nurturing will eventually decline. A more recent definition by Foster and Matthews addresses some of these issues.

Giftedness is exceptionally advanced subject specific ability at a particular point in time such that a student's learning needs cannot be well met without significant adaptations to the curriculum.

<div align="right">(Matthews and Foster 2005, p12)</div>

This brings us back to the most recent Irish definition as published in the draft guidelines by the National Council for Curriculum and Assessment (NCCA, 2007). The term exceptionally able is used in the guidelines to describe students who require opportunities for enrichment and extension that go beyond those provided for the general cohort of students.

With that in mind approximately 5-10% of the school population may be exceptionally able and will 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.

<div align="right">(NCCA 2007, p8)</div>

This definition is not too far off the Marland definition at the beginning of this section. In truth Ireland has arrived at a late stage to the debate on giftedness and there seems to be fear of subscribing to one particular definition in case it excludes a particular group of high ability students.

From my reading of the literature I would subscribe to the view of a domain specific view of giftedness as described by Van Tassel-Baska (2005) and Brody & Stanley (2005). I think the original notion that people who are gifted have to be good at all subjects is an outdated one and that people do excel in different subject areas. This idea of subject specific ability is included within the NCCA definition but they also

include people who have general intellectual ability as well. In my opinion the problem with the Marland definition as well as the NCCA definition is that they seem to incorporate too many aspects within the definition. Take for example the inclusion of leadership ability and creative and productive thinking, while these are measures that a gifted individual may possess they are very difficult to quantify in an objective manner and may be better suited to the curriculum for gifted learners rather than within a definition. Within this research study I am interested in finding out what the perceptions of giftedness are for the students and parents who participate in classes for high ability students in Ireland to see if they agree with any particular definition from the literature.

Early and Modern Theories of Giftedness

In his work Hereditary Genius (1869), Sir Francis Galton focused on subjects with exceptionally high mental ability. Galton proposed that attributes such as height are stable over time and determined by hereditary factors passed on from parents. Consequently Galton believed that mental capacities of adults are related to the size of an individual's brain. While he acknowledged that training is needed to reach high levels of performance he believed that improvements were rapid only at the beginning of training and gains became smaller later on. As a conclusion he believed that these characteristics were innate factors rather than ones that could be improved sufficiently by practice. These theories had a profound influence on the early development of the concept of giftedness. In fact many of his theories are still used today. Jensen (2002, p.167) concluded that

"overall Galton's paradigm, with its roots in evolutionary theory, genetics and physiology have proved essentially sound."

Furthermore Detterman and Ruthsatz (2001) argued that in situations where practice, instruction or intervention is applied, the most important determinant of a person's final position in a distribution will be their position in that distribution before practice, instruction and intervention.

Binet and Simon (1916) theorised that intelligent thought was composed of three distinct elements: direction, adaptation and criticism. They devised a series of tests that consisted of a variety of exercises to measure higher-order thinking abilities. One such exercise could be a test to determine whether two year old children could match different shapes to their corresponding slots on a board. Suitable tests for six year olds could be word definition, or "odd-one-out" puzzles. By fourteen, tests would involve reasoning and ingenuity. Binet's theory was much closer in its conception to real-world intelligence than was Galton's. His test items, distant as they were from real-world problem-solving and decision-making techniques, were better predictors than were those suggested by Galton (Sternberg, 1993).

Lewis Terman (1877 - 1956) is considered by many to be the most influential researcher in the area of giftedness. In 1916, Terman created the Intelligence Quotient (IQ) calculated by dividing mental age by chronological age and multiplying by 100. Terman believed IQ to be constant, making it possible to predict the IQ of an adult in childhood. Terman defined giftedness as scoring two standard deviations above the norm on this standardised IQ test. As well as developing the IQ test Terman (1925) was responsible for one of the most famous longitudinal study into giftedness. This study investigated the lives of 1528 school children with an IQ of 135 or higher. In early practice, the term "genius" (Galton, 1869) was used to denote people of highly superior ability, but the huge influence of Terman's studies saw a gradual shift to the

term "gifted" (Feldhusen and Jarwan, 1993). One important outcome of Terman's research was that precocious children were no longer thought of as mutants who possessed some kind of freakish power bestowed upon them by accident. Up until Terman's study was published, a common misconception was that eminent individuals were in some way psychotic or pathological (Colangelo & Davis, 2003). Terman and his associates found that highly gifted children, far from being sickly, unstable and anti-social, were in fact intellectually, physically and emotionally superior to average children, and that this superiority was maintained into adulthood (Sears, 1979).

Monks & Katzko (2005) outline that Terman's model showed that intelligence as measured by an intelligence test is genetically determined and therefore permits the possibility to predict later achievements. They also point out that Terman believed that this genetic origin could be attributed to one factor, the g factor theory of intelligence. Later though it is believed that Terman (1954) also came to the conclusion that personality factors and a supportive environment were contributors to high ability (Monks & Mason, 2002; Monks & Katzko, 2005).

While Terman's study did much to promote the status of gifted children in education and society as a whole it was heavily reliant on IQ as a measure of giftedness and precipitated the notion that one test fits all for gifted children. In contrast, most of the modern theories seem to favour a multidimensional approach to giftedness.

The most publicised work of recent years is that of Howard Gardner (1983), who proposed the theory that the human organism possesses distinct units of mental functioning, which he labels as "intelligences". He also asserts that these separate

intelligences have their own specific sets of abilities which can be observed and measured. Gardner (1983) also suggested a concept of multiple intelligences including linguistic, logical/mathematical, spatial, musical, bodily-kinesthetic, interpersonal, and intrapersonal intelligence. Later he added naturalistic, spiritual and existential intelligence (Gardner, 1999). The important extension beyond Terman's work is that Gardner believes that giftedness results from innate abilities in interaction with a supportive environment. Modern theorists such as Van-Tassel Baska (2005) have much in common with Gardner's theory by advocating a domain-specific model of giftedness. This model promotes an idea of giftedness that is bounded by the specific domain within which giftedness exists. Ability and aptitude within a particular area may specialise the work even further. This theory is directly in conflict with the concept of a g factor of general intelligence.

Sternberg was one of the first to question whether IQ is a reliable indicator of intelligence. He developed the model of the Triarchic Theory of Intelligence (1985). Sternberg's theory also looked at environment in relation to gifted theory. Sternberg believes that a person is successfully intelligent by virtue of how they adapt, shape and select environments. This is something that is not measured in traditional IQ tests. More recently he refers to three distinct forms of intelligence: analytic, creative and practical and suggested that giftedness was related to success in life.

While Gardner and Sternberg were hugely influential in developing cognitive models to describe giftedness, Joseph Renzulli is very important in developing an achievement oriented model called the Three Ring Concept of Giftedness (1978). This theory originally published in Phi Delta Kappan magazine was rejected by most gifted education journals at the time but is now the most widely cited publication in

the field. Renzulli (1986) stated that gifted behavior reflects an interaction among three basic clusters of human traits: above-average general and/or specific abilities, high levels of task commitment (motivation), and high levels of creativity. According to Renzulli, gifted and talented children are those who possess or are capable of developing this composite of traits and applying them to any potentially valuable area of human performance. Renzulli (2005) distinguished between schoolhouse giftedness and creative-productive giftedness. While recognizing the importance of both types he defined schoolhouse giftedness as test taking giftedness measured by IQ. Creative-Productive giftedness goes beyond IQ tests to identify students who are original thinkers and use this ability to solve problems in their immediate environment.

Tannenbaum's model (1983) takes a systematic approach to giftedness where he believes outstanding achievement is determined equally by five factors: general ability; special ability; non intellective factors; environmental factors; and chance factors. Tannenbaum's systematic perspective was one of the first to include how interacting influences may affect a child's life and development. These included the influence of family, the schools, and even the economic environment and political and social agendas.

While acknowledging the important impact that Galton and Terman had in furthering our understanding of the area of giftedness, in my opinion we must move beyond using IQ as the sole measure of identifying gifted persons. While IQ is a useful indicator in predicting academic ability, it is important to consider environmental factors as well as advocated by Gardner and Sternberg. However I think it is not that clear in the literature from where this environment originates. Is it at home or is it in

school in the case of gifted students? This research will attempt to explore the environmental factors that are important in the minds of the students and parents that participate in this research. Consequently the research will examine the level of support that the students receive from various sources at home and at school and also will look at the level of academic challenge that the student experiences at school.

Giftedness and Political Climate

The emphasis a country places on gifted students or the concept of giftedness in general is usually dependent on the educational policy and educational philosophy of that particular country (Gross, 2003). In some countries education is highly centralised and a certain educational philosophy dominates. Ireland, for example has an egalitarian philosophy where national legislation and policy can have a tremendous influence on the development of any initiatives for gifted and talented programming. In countries with decentralised educational systems the climate for program development may vary considerably in different regions or in different historical time periods. In Canada gifted and talented programming varies by province while in the United States it varies by state or school district. In Australia gifted programming tends to be influenced by the political party in power and can vary by time as well as region.

Cultural influences on gifted education are often related to educational philosophies. Freeman (1992) points out that the egalitarian philosophy holds that the primary purpose of education is to create similar outcomes for all students. Therefore an important educational goal in an egalitarian culture is the reduction of individual differences (see Robinson, 1999). Those with an egalitarian philosophy of education

often oppose homogenous grouping of high ability students on the grounds that gifted classes are elitist, and that gifted students can make it on their own without needing special interventions (Moon & Rosselli, 2000). Furthermore egalitarians often believe that other students will suffer academically when deprived of association with high-ability classmates (Oakes, 1985; Slavin, 1987).

Countries with egalitarian educational philosophies can be influenced by advocacy to modify their stance. Finland for example has become more receptive to gifted education because of pressure from industry for greater investment in excellence (Tirri & Uusikyla, 1994). In Ireland too falling numbers of people taking science and technology courses at third level has led to widespread investment in the science and technology sector at school level to promote the study of science. The foundation of Discover Science and Engineering (DSE) is an example of this. DSE's overall objectives are to increase the numbers of students studying the physical sciences; to promote a positive attitude to careers in science; to generate an interest in engineering and technology and to foster a greater understanding of science and its value to Irish society. Within the courses at CTYI there is a huge interest in science programmes with classes in Forensics, Chemistry, Zoology and Astronomy proving very popular with the students.

In contrast Gallagher (1993) points out that an equal opportunity culture values equality of opportunity more than equality of outcomes and recognises or should recognise that providing equal opportunities may actually increase the differences between individuals. A core educational value in an equal opportunity culture is adapting instruction to meet individual needs while in an egalitarian culture achieving

excellence beyond age groups is discouraged. Moon and Roselli (2000) point out that egalitarians tend to reject gifted education when it is based on narrow conceptions of giftedness as innate, fixed and measurable. They are more open to giftedness when it is focused on multiple talents and developed in inclusive settings. On the other hand Robinson (1999) points out that equal opportunities cultures encourage the development of a range of activities for talent development of gifted students. Much of this can be based on the availability of funding and resources. Naturally when resources are ample then many options exist for gifted students but where resources are scarce the needs of the gifted are usually a lower priority than those of disadvantaged and disabled students.

This thesis will address some of the issues relating to giftedness and political climate in Ireland. I will look at the issue of whether it is possible to promote special classes for gifted students in an egalitarian culture. In my opinion the message within the Irish system seems to advocate for including gifted students within the regular classroom. Yet the literature on definitions of giftedness that we have looked at so far is suggesting that we need to go beyond the regular school curriculum to provide adequate stimulation for gifted students (see Marland, 1972; NCCA, 2007). This study will look at this issue by asking students and parents to rate their academic satisfaction with the special classes that they have attended at CTYI and to compare this with their level of satisfaction at school. In this way we will be able to get a better picture of how to best serve the interests of gifted children in Ireland.

Acceleration and Enrichment

Pressey (1949, pg. 2) defined acceleration as "progress through an educational programme at rates faster or at ages younger than conventional". Three assumptions can be identified in this definition. Firstly, it presupposes an educational programme in which content, tasks and skills are defined for each level of instruction. Secondly, it assumes that there is a pace of instruction that may at least be inferred to be suitable for most students. Thirdly, and most importantly for this research, it assumes that some children are capable of mastering the standard curriculum faster, and thus are capable of more rapid progress. Pressey's definition sets two criteria for accelerated advancement: higher-than-average achievement, and the ability to master the material at faster rates compared to age-level classmates (Southern, Jones and Stanley, 1993). The students who participated in this study matched both of these criteria.

Schiever and Maker (2003) believe the term acceleration is used to denote models of service delivery and curriculum delivery. Service delivery acceleration offers standard curricular experiences to students at a younger than usual age or lower than usual grade level. Sisk (1988) identifies options such as grade skipping, early entrance to elementary school and early entrance to college as examples of service delivery acceleration. Acceleration as a curriculum model involves speeding up the pace at which material is presented or expected to be mastered. This form of acceleration may take place in regular classrooms, resource rooms or special classes. While acceleration is defined as more rapid than typical advancement within a given curriculum, enrichment can be regarded as a process that extends instruction beyond the bounds of that curriculum. Passow (1958) identifies guidelines for the development of enrichment programmes. He suggested the curriculum be modified in

a number of ways. These include covering the material in greater depth, altering the pace or tempo of delivery of the material and broadening the range of materials

Davis and Rimm (2003) describe an enriched curriculum as a curriculum that has been modified in some way. These modifications may be in content or teaching strategies and ideally they are based on the characteristics of the learner for whom they are designed. Schiever and Maker (2003) describe the goal of an enrichment programme as offering students subject matter that is greater in depth and breadth than generally provided. Howley, Howley & Pendarvis (1986) describe three approaches to enrichment: process oriented, content oriented and product oriented. Process oriented approaches develop students mental and creative thinking skills. Content-oriented approaches stress the presentation of a particular content area in more depth than the student has previously encountered. Product oriented enrichment emphasise the result of instruction rather than the content or processes involved.

Acceleration or Enrichment?

Studies of acceleration contain an overall message: acceleration contributes to achievement (see Gallagher, 1975; Daurio, 1979; Kulik and Kulik, 1984). In terms of social and emotional development, no harmful effects have been listed (Keys, 1938; Pressey, 1949; Hobson, 1963; Daurio, 1979). There is much debate over whether enrichment or acceleration is the best means of developing the potential of the talented child. Renzulli (1979) questioned whether progressing through the curriculum at a faster pace than usual met any of the important needs of gifted students. Stanley (1978) on the other hand believes that enrichment eventually leads to frustration as the talented student will need to accelerate at some stage during the enrichment programme. Daurio (1979) concluded that acceleration seems to be the

more feasible method for meeting the needs of gifted students. However, if enrichment exists in the form of original curriculum and problem-solving beyond the boundaries of the regular curriculum, it may be viewed as acceleration (McLeod and Cropley, 1989, pg. 195). Fox (1979) observed that the two terms are complementary rather than conflicting. In practice meeting the needs of gifted students requires that abstract and complex concepts be taught (enrichment) and that students proceed at a pace that is more rapid than the average learner (acceleration) in their area of expertise. CTYI offers fast-paced classes in an intensive learning environment. The content matter may be more in-depth than the student would be used to at school, or the student may be exposed to new areas with which they may not be familiar. In this way, the classes at CTYI are both accelerative and enriching.

Pullout Programmes

Research has shown that most academically talented children spend little time in school in their regular classes with other gifted children (Archambault et al, 1993; Cox, Daniel, & Boston, 1985). Statistically this would be correct as if we are looking at students in the 95th percentile as we would only find one student within a group of twenty. Olszewski-Kubilius, Grant & Seibert (1993) found that children placed in classes with other gifted students are more likely to foster friendships based on common interests and general support for educational pursuits. Furthermore Rimm (1991) points out that these programmes may be necessary to counteract the danger of underachievement within gifted students due to a lack of academic stimulation and an absence of peer support in their regular schools.

Cox et al (1985, p. 43) describe pull out programmes as
"an administrative arrangement that places gifted students in heterogeneous classrooms for most of their instruction and pulls them out to study with other bright youngsters in special classes in a different setting for a portion of the school week."

Pull out programmes where students leave their regular classroom to work with a specialist trained in gifted education represent a common form of gifted education in the United States. Swiatek & Lupkowski-Shoplik (2003) conducted a survey of 4500 gifted primary school students (third to sixth grade) and found that 40% of these students participated in pull out programs.

Vaughan, Feldhusen & Asher (1991) found that gifted students enrolled in these programmes showed greater gains in achievement and thinking skills than gifted peers who received no additional services. They had significant positive effects in achievement, critical thinking and creativity. Kulik (1992) examined 25 studies that explored the use of enrichment pull out programmes for gifted students. This study found that gifted students who received these courses outperformed gifted students who did not receive these services on standardised achievement tests. Kulik (2003) suggests that gifted and talented students have a need for instruction that focuses on depth and complexity rather than mere skill focused exercises.

Davis and Rimm (2003) point out that popular belief suggests that that pull out programmes make students feel out of synch with their regular classmates. Indeed Sapon-Shevin (1996) questions the impact of these classes on gifted students. Feldhusen (2002, p.229) believes that the times on these programmes are often limited to an hour or two of pullout time a week and because of this he states that "little good is accomplished with such programs." Many advocates believe that pull out programmes are a temporary solution to a bigger problem (Van-Tassel-Baska, 1987; Feldhusen 1991). They believe that full time programming as the best model

for educating high ability students. However the research has shown that pull out programmes have a predominantly positive impact of the students. Cohen, Duncan & Cohen (1994) found that gifted students enrolled in pull out programs were evaluated positively by their peers, more aware of the demands of friendships and perceived less often as victims by their classmates. Moon (1995) found that students enrolled in these programmes had better family and school relationships. Moon, Feldhusen & Dillon (1994) investigating a pull out enrichment programme found that the programme had a positive effect on most students and achieved its goals.

Pull out programmes and other such interventions like special schools for gifted students are currently not available in Ireland for gifted children. I think that there would be a huge problem implementing pull out programmes on a large scale in Ireland. On the one hand there would be a question of who should teach these students and there would also be a problem with identifying suitable students. Finally the costs involved to the state in training special teachers to provide these classes would be prohibitive. Currently the only provisions available to high ability students in Ireland are out of school programmes and the literature on these programmes are reviewed below.

Out of School Programmes

Olszewski-Kubilius (1989) argues that educational programs outside of school are necessary for gifted students because of their special educational needs. Typically these programmes provide a level of challenge and a pace of learning that is more suited to the intellectual capabilities of gifted students and different to what they

encounter in school. For many gifted children this is the first time that they have been placed in a learning environment that requires study and work.

Olszewski-Kubilius (1989, p.423) outlines the purported benefits of special programs.

- Perceptions of increased social support for learning and achievement due to the homogeneous grouping with other gifted students;

- Positive feelings resulting from a learning situation that presents a more appropriate match between the students' intellectual abilities and the challenge of a course;

- Development of study skills as a result of immersion in an intellectually challenging course;

- Development of independence and enhancement of general living skills;

- Increased knowledge about university programs and college life;

- Raising expectations and aspirations for educational achievement due to success in a challenging learning environment;

- Self testing of abilities due to placement in an intellectually challenging situation and subsequent re-evaluations and new goal setting that can further a student's progress in attaining excellence.

CTYI organises Saturday classes at Dublin City University and at various centres around Ireland to provide accelerative enrichment programmes for talented students during the year. These courses are of nine weeks duration and aim to broaden students' minds in a variety of areas which they would not normally tackle in their curriculum at school. The criteria for qualification for these classes is based on an assessment test.

Feldhusen and Sokol (1982) identify some key cognitive needs of talented students addressed by Saturday programmes. The gifted must try to acquire a broader store of

knowledge, learn new research methods, and exercise self-direction in learning. Saturday programmes provide the opportunity for gifted and talented youth to engage in some in-depth study in areas of interest, with a curriculum that can be enriched and accelerated to fit students' needs. Saturday programmes should offer a wealth of information (**enrichment**) at a fast pace (**acceleration**). Feldhusen and Ruckman (1988) suggest that an effective Saturday programme should run between a seven and twelve week period, with two to three hours instruction per week. This allows sufficient time for detailed pursuit of a topic for any significant project involvement. Feldhusen and Wyman (1980) believe that a college or university campus is an excellent location for a Saturday programme. College or university lecture theatres provide an excellent setting for the classes and the professional academic environment may serve as a career stimulus for the talented adolescent.

Researchers and practitioners have proposed the need for special out of school programmes for gifted students who face barriers in developing their academic capabilities in regular schools (Benbow & Stanley, 1983a; Olszewski-Kubilius, 1997; Olszewski-Kubilius & Lee, 2004). Feldhusen (1997) states that gifted students often do not have a variety of educational opportunities available to them in their schools and out of school programs are necessary in filling this void and fostering talent development. Certain out of school programs enhance gifted students self confidence, self esteem, motivation to achieve and personal responsibility for learning (Olszewski-Kubilius & Grant, 1996). This enables them to succeed in subsequent academic courses after the programs. Rimm (1991) stated that special programs for academically gifted children may be necessary to save them from a pattern of

underachieving or poor study habits that result from easy or boring classes in their regular schools.

The talent development process may require additional instruction beyond what schools can or are willing to provide (Bloom 1985). Olszewski-Kubilius (2003) states that research has indicated that gifted writers and scientists may spend considerable time learning in their talent area from parents or mentors but at a certain level parents may only be knowledgeable enough to instruct their child to a certain point.

Summer Programmes

Another out of school programme option for gifted students is summer programmes. CTYI run summer programmes for high ability students at Dublin City University and the secondary school students from this study attended this programme. Summer programmes for gifted students may vary in length and focus but most have several components in common: an accelerated and enriched curriculum; dedicated staff; peer interaction with others of similar ability; and a supportive environment (Olszewski-Kubilius, 2003). Coleman & Cross (1988) report that some high ability children report to feeling different to others so placing them on programmes with like minded individuals may enhance feelings of acceptance. Enerson (1993) found that summer programmes may help to meet gifted students academic, social and psychological needs.

Enerson (1993) also found that while satisfaction with challenging course work taught by expert teachers and the opportunity to live on a university campus was

important, making friends and gaining confidence in one's ability is equally vital. The fact that so many students return to the courses validates this assertion with the same people meeting up every year. Kolloff and Moore (1989) point out that the most critical aspect for students on residential programmes is to discover that there are other young people who think the same way as they do, who are interested in the same ideas, and who like to learn in similar ways.

Summer programmes have been found to be positive experiences for gifted students, offering them opportunities to interact with other equally-able students and to further develop their intellectual ability (Van Tassel-Baska, Landau, & Olszewski, 1985). The social component is a very important aspect of the summer programme at CTYI, and as Feldhusen (1991) points out, the opportunity to share a common viewpoint or discuss a topic deeply and passionately is not typically available in a forty minute period. Rimm (1991) points out that these classes may be necessary for gifted students to stop them from underachieving or developing poor study habits. As Enerson points out, programming should stimulate curiosity and investigation while introducing new areas of interest.

In the United States, these programmes have long been a fixed element of out-of-school provision for highly able students (Olszewski-Kubilius, 1989). The Center for Talented Youth (CTY) at Johns Hopkins University that the CTYI model is based on runs a summer academic programme organised on the following principles:-

- Academically talented students should be provided with the opportunity to learn subject matter and develop skills at a pace and level appropriate to their abilities;

- Academically talented students require a rigorous and challenging course of studies in the liberal arts, and CTY sees this area as the most valuable embodiment of verbal and/or mathematical ability;

- CTY combines rigorous and challenging educational coursework with a social experience that encourages the development of a balanced human being;

- Students' academic accomplishments should be acknowledged and rewarded.

(http://www.cty.jhu.edu)

Classes are kept small so that students may interact with one another, for experience shows that students learn as much through intensive interaction with their peers as they do through direct instruction (see Mills and Durden, 1992, and Tangherlini and Durden, 1993). The class size at CTYI allows a pupil-instructor ratio of around fifteen to one, which is much lower than the average class size in both Irish and American schools. The intense nature of the programme means that students are required to put in a very high level of work during the period and for many students this may be the first time that they have ever really been challenged academically. Adjusting to this new challenge allows them to maximise their high academic potential.

Hany and Grosch (2007) report that participants on the German School Students Academy, a summer enrichment programme look back on their experiences with great enthusiasm. Wagner (2003) found that headmasters of the regular schools of the participants report positive changes from the group that attended.

Students in fast paced summer courses perform better on standardised tests than students who spend an entire year in regular classes (Stanley 1976). A five year study by Barnett & Durden (1993) found that students who participated in summer courses with the Centre for Talented Youth were more likely to take college courses while still at school and attend more competitive colleges than their gifted peers who had not attended programmes. Olszewski-Kubilius & Grant (1996) found that students who participated in accelerated summer programmes continued a pattern of high achievement in high school and college.

Enerson (1993) studied the effects of an intensive residential summer programme on students self perceptions, attitudes and feelings. Results demonstrated that students on these programmes had built a positive self image through interactions with peers who were their intellectual equals. Participants said they felt accepted by other students on the programme and they had similar academic and personality characteristics. One's judgement in relation to out of school programmes may depend on your educational philosophy. If you believe that gifted students are those with special needs then outside school programmes are necessary for their development (Olszewski-Kubilius, 1989).

The literature on out of school programmes led me to ask some key questions in this study. I wanted to find if the students who came to CTYI experienced barriers in the regular school. I also wanted to see if they were lacking academic challenge at school and if this led to poor study habits. I wanted to get a notion of how these students ranked themselves compared to their peers at school and whether they believed that they needed special tuition from subject experts in various areas to satisfy their thirst

for intellectual knowledge. These questions were all covered in the questionnaire that was designed for this research that will be discussed in the next chapter.

Parental Perceptions and Effects of Special Programmes.

There is empirical evidence that parental interest, encouragement, support and expectations have a direct influence on children's enrollment in advance classes (Stallings, 1985 and Olszewski-Kubilius, & Yasumoto, 1995). Horvat, Weininger & Lareau (2003) suggest that parents connect with other parents of children who participate in supplemental educational or sports programs. These links assist them when dealing with educational issues regarding their child. Parents seek out special programs because they believe they will provide a better and more appropriate academic and social environment for their child (Olszewski-Kubilius, 2003).

There is some research about parental perceptions on the effects of outside of school classes on gifted students. VanTassel-Baska, Landau and Olszewski (1984) found that parents perceived positive changes in teenage children after participation in a three week programme. Enersen (1993) found that parents of students who participated in a residential summer programme believed that the main benefit of the program was their children's new friendships with intellectual peers. Moon, Feldhusen & Dillon (1994) found that parents perceived that their children's interaction with other gifted peers was one of the main advantages of participating in a pullout enrichment programme.

Large scale research projects document higher achievement for students in accelerated programs (Kulik, 1992) and also enrichment programs (Rogers, 1991). Hertzog (2003) noted that college students perceived that they had acquired better study and time management skills through accomplishing tasks on gifted programs. Other positive outcomes from this study included higher self esteem as a result of mastering challenging coursework and the development of a healthy work ethic. Olszewski-Kubilius & Grant (1996) fount that students who had participated in an accelerated summer programme continued a pattern of high academic achievement throughout their school careers.

Delcourt, Loyd, Cornell & Goldberg (1994) investigated more than 1000 gifted students in grade 2 and 3 and found that students enrolled in either special schools or pullout programmes achieved more highly than students served within class programmes. Archambault, et al (1993) in a survey of more than 7000 schools found that few teachers were modifying the curriculum for gifted learners and the same research team observed that the majority of teachers provided no differentiation for gifted learners and had no formal training in gifted education.

Moon, Feldhusen & Dillon (1994) examined the long term effects of an elementary pull out programme for gifted students. They found that both parents and students believed the programme had a long term positive impact on the cognitive, affective and social development of the students who participated.

Renzulli (1987) points out the strengths of a pull out programme to include interaction with other gifted students, trained teachers and differentiated curricula.

The weaknesses include fragmentation, disruption of class routines and missed instruction (Cox and Daniel, 1984). In fact scholars such as Van Tassel-Baska (1987) and Feldhusen (1991) advocate full time self contained programmes as being the best practice for the gifted. I would believe that the answer to this question lies somewhere in between these extremes. While pull out programmes can be effective, it seems to be the case that there is little consistency across the board on these programmes and that some students do not get enough tuition in any given week. On the other hand a full time self contained programme can ensure that all students get a high level of tuition every day but there is a danger of creating an elitist atmosphere by only allowing them to interact with other gifted students every day.

Olswekski-Kubilius & Lee (2004) in a study of parent perceptions on the effects of a Saturday enrichment programme found that overall parents were satisfied with the quality of the programme. Parents in this study perceived benefits regarding academic growth and development. They also felt that the classes were more challenging and demanding than their regular classes. These results match those of previous studies (Moon & Feldhusen, 1994; Moon, Feldhusen, & Dillon, 1994; Moon, 1995).

Enrichment programmes in general have been seen to be effective. They further creative and productive thinking (MacRae & Lupart, 1991; Renzulli & Reis, 1994), they enhance achievement and mastery motivation (Frost, 2005), and they develop positive self-confidence (Neber & Heller, 2002).

Adams-Byers, Whitsell & Moon (2004) found evidence of both positive academic and social-emotional benefits from special classes. This evidence is backed by other

research in the area (Feldhusen & Moon, 1992; Sayler & Brookshire, 1993; Moon & Roselli, 2000). Indeed Kulik (1992) in a meta-analysis study of special programmes found that high ability students in accelerated classes significantly outperformed their gifted peers who had not been exposed to acceleration.

This part of the literature review greatly influenced the design of my research study. There is definitely a shortage of studies by parents of gifted children in the literature and I wanted to address this by asking them their opinions on the special programmes that their child attended. I also wanted to monitor what effects they perceived that the special programmes had on their child to see if this was consistent with findings from other studies. I was interested in exploring the notion of whether parents perceived the effects of these programmes to be either academic, social or a combination of both. The parental questionnaire and the follow up interviews in this research documented these issues.

Talent Search and Optimal Match

The Talent Search concept pioneered by Julian Stanley in the 1970's offers a challenging test designed for older students to bright motivated younger students as a means of identifying exceptional talent in a specific domain. The Talent Search is effectively a two step process. Firstly students who score highly on a standardised achievement test are invited to take an above level test as a measure of their aptitude. Secondly the above level test is administered to the eligible students. Normally this test would be suitable for students two to four years above the students taking the test. This allows those students who have hit the ceiling in grade achievement tests to demonstrate their advance abilities (Lupkowski-Shoplik, Benbow, Assouline, & Brody, 2003). This approach uses 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 (Charlton, Marolf, & Stanley, 2002; Olszewski-Kubilius, 1998). If a student is scoring at the 97th percentile for his age in grade level test then he/she has usually answered all the questions on this test correctly. The results of this testing can show that a student has mastered the material expected for their particular age but will not be able to show what the student might know beyond the grade level (Swiatek, 2007). By providing this above level or out of level testing, talent searches allow parents and schools to determine how much a child's level of performance differs from the performance of other above average students (Matthews, 2008). Furthermore it allows parents to decide what curricular modifications might be necessary for meeting the child's academic needs. Stanley (1991) suggests that the overall purpose of the Talent Search Model is to educate for individual development over the lifespan of the student. Benbow and Stanley (1983b) point out that the major principles of the model include the use of a testing instrument that taps into high level verbal and mathematical reasoning to identify the students; a diagnostic testing-prescriptive instructional approach in teaching gifted students through special classes allowing for appropriate level challenge in instruction; and use of subject matter acceleration and fast paced classes in core academic areas.

Stanley (1991) describes the origin of the Talent Search concept. Stanley administered several tests to a highly gifted 12 year old student in the 1960s, including the Scholastic Aptitude Test (SAT) and found his results to be quite remarkable. Traditionally the SAT is used as a criteria for college entrance amongst American teenagers usually aged around 17 years. Stanley explains how he believes above level testing is the answer for identifying these students. While many gifted

students will achieve very high scores on tests for their own ages using an above level test can measure potential ability in certain areas. It allows the administrator to distinguish between talented students who score at different points on an above level test. The Talent Search model demonstrated that true potential for specific academic work in maths and verbal areas can be discerned better by administering an above level test like the SAT. This can prove much more effective than using a cut-off point measure which can eliminate some high ability students before they reach full potential. For example if you use a cut-off IQ measure of say 125 what happens to students who score 124 on a given test. There is a danger that these students may be neglected or not allowed to reach full potential. The other benefit of the SAT is that it measures specific areas of aptitude rather than looking at only global intelligence. Research has shown the benefit of the SAT in finding students who benefit from advanced course-work in specific areas (Benbow, 1992; Benbow & Stanley, 1983a). Van Tassel Baska (1983) spoke of the two important principles demonstrated by the different abilities tapped by SAT testing. Firstly the more gifted the student, the greater the need for summer programmes, correspondence study and general mentorship. Secondly the need for extension of existing services provided by school to allow these students to fulfil their potential.

Benefits recorded from Talent Search include students gaining a better understanding of their academic abilities (Brody 1998) and students identified through talent searches reporting higher educational and career aspirations (Van Tassel-Baska, 1989; Wilder & Casserly, 1988). Enerson (1993) points out that Talent Search educational programmes such as summer courses or Saturday classes provide students with greater opportunities to experience academic challenge. Olszewski-Kubilius &

Grant (1996) documented that students who participate in talent searches are more likely to participate in academic extracurricular activities and to pursue more rigorous academic courses and careers in the future. The predictive validity of above level tests has been demonstrated by the academic success of high scoring students (Swiatek, 2007). Longitudinal studies have documented impressive achievements amongst seventh and eighth graders who have taken the SAT (Stanley, 1976; Stanley & Benbow, 1986; Lubinski & Benbow, 1994). Furthermore Barnett & Durden (1993) found that students who participate in talent searches and went on to take advanced academic programmes were more likely to pursue academic challenges while still in high school and to enter more competitive colleges and universities. Talent Search methods have been shown to be effective at identifying primary school students as well (Colangelo, et al, 1994; Lupkowski-Shoplik & Swiatek, 1999).

Even if one believes that gifted students will usually achieve at a high level, it appears that they do not achieve as highly if deprived of a developmentally appropriate education. The Talent Search Model effectively identifies talented youth who later demonstrate exceptional adult achievements (Lupkowski-Shoplik, et al, 2003).

Rotigel & Lupkowski-Shoplik (1999) list the benefits of participating in Talent Searches to include: educational diagnosis; educational recommendations for particular student; appropriate information; educational awards; and further educational opportunities. Looking at this a little closer we can see that the benefit of diagnosis is that above level testing will give a more accurate picture of the ability of the particular student. Recommendations and appropriate information will allow the child to have a better sense of where their abilities lie and what options may be

available for them at school. Awards are very important as most of the participants will be asked to participate in an awards ceremony to recognise their ability. Goldstein and Wagner (1993) believe that these ceremonies represent the first and possibly only opportunity for public recognition many of these exceptional youngsters will receive.

Since it's development over three million students have participated in talent searches in the United States and every year nearly 240,000 students in America are tested via talent search (Lee, Matthews, & Olszewski-Kubilius, 2008).

At the heart of the Talent Search and CTYI's instructional approach is a characteristic common to all effective approaches in nurturing intellectual talents: The Optimal Match Principle (Tangherlini and Durden, 1993). Simply stated, an appropriate education experience is one which challenges the individual to perform at a level just beyond his or her cognitive grasp (Redding, 1989). Once a student has mastered a subject on a given level, he or she must be allowed to proceed to the next stage. An optimal match is the adjustment of an appropriately challenging curriculum to match a student's demonstrated pace and level of learning. Robinson and Robinson (1982, p.42) believe that the optimal match assumes the following principles:-

- Learning is sequential, developmental and relatively predictable; one can assess a student's progress in mastery of orderly sets of concepts and skills.

- Once a learner has mastered a given level or stage of understanding, it is time to proceed to the next level. Delay will result in boredom, while too rapid a pace will cause confusion and discouragement. An optimal match, an appropriate challenge, results in conceptual depth, intellectual excitement, and growth.

- There are substantial differences in skills and knowledge among children of a given age that primarily reflect differences in their rate of learning. Individual differences characterise not only general intelligence, but more importantly for educational purposes, specific subject areas, e.g. mathematics, foreign languages, literature and science. One student may be more advanced in some domains than in others. Providing for the optimal match involves taking these differences into account.

This model is still entrenched in the theory that psychometric tests are the best measure of a child's ability. While allowing for the notion that giftedness can encompass subject specific areas Stanley's model still advocates the notion that testing needs to be used as a method of identification. There is also the assumption within his model that learning is sequential which is another theory that has been challenged by more modern theories of giftedness. Stanley's model also assumes that the gifted student is displaying high achievement and therefore needs extra stimulation to fulfil his/her potential. It does not take into account students who may have ability but who are currently underachieving.

Mills and Durden (1992) point out that this model advocates that schools should aspire to the ideal of achieving the optimal match between each student's needs and the school system. If the student demonstrates a high level of ability in a particular subject, or a high level of interest and achievement, then these needs exist. If they cannot be adequately met within a school programme, some degree of intervention is needed.

I believe the Talent Search is an effective model for identifying high ability children. The use of out of level testing allows us to challenge a student beyond their normal school level. As Enerson (1993) points out these types of educational programmes are needed to stimulate academic curiosity within gifted students. In my opinion out of school programmes are necessary for the brightest students who may not be challenged enough in school. This idea of appropriate academic challenge is a key theme in this research. As part of this research I want to find out if the students and their parents perceive a different level of academic challenge while attending an out of school programme compared to school and whether they have a more positive attitude towards attending these programmes because of this increased academic stimulation.

Myers-Briggs Research

The **Myers-Briggs Type Indicator (MBTI)** is a personality measure based on Jung's theory of psychological types. According to Pittenger (1993) over two million copies of the MBTI are sold annually and the test has proved useful in a variety of settings such as large corporations as a component of job performance and in academic settings for use by both students and teachers alike as part of career counselling. Thompson & Borello (1986) support this view and state that the MBTI measures variation in normal attitudes and behaviour and may be seen as appropriate for research in educational settings. Myers and McCaulley (1985) describe the MBTI as an instrument containing four separate indices with each index reflecting one of the four basic preferences that direct the use of the perception and judgment processes. These four can be summarised as a preference between extroversion and introversion (E-I), sensing and intuition (S-N), thinking and feeling (T-F) and judgement and

perception (J-P).These four preferences give rise to sixteen individual types of the MBTI that differ only in the priorities given to each process and the attitudes of the individual when he or she uses a particular function. An example of one of the 16 types is ESTJ where in this instance the individual has a preference for Extraversion (E) over Introversion (I); Sensing (S) over Intuition (N); Thinking (T) over Feeling (F) and Judgment (J) over Perception (P).

Hawkins (1997) noted that several studies have explored the MBTI types of gifted students and have indicated that types including Intuitive (N) and Intuitive-Perceiving (NP) are particularly common in this group. Parker & Mills (1998) further reinforced this view of N and NPs being common in high ability students. Hawkins found that ENFP (16%) to be the most common type for gifted students followed by ENTP (10%) and INFP (9%) and INTP (9%). Parker & Mills found ENTP and ENFP to be the two most common type in their sample. Intuitive-Perceivers NPs made up 45% of Hawkins sample and 56% of the Parker and Mills sample. Intuitives (N) made up 66% of Hawkins group and 73% of the Parker and Mills sample. Cross, Spears-Neumeister, and Cassady (2009) found that male gifted students were slightly more likely to orient towards Introversion (I) while females tended to show a preference for Extraversion (E). Furthermore they found that male gifted student tended to be characterised by Thinking (T) while females were more inclined towards Feeling (F). Swiatek and Cross (2007) on a study of gifted students in a state funded residential academy found the most frequent types as being ENTP (11.2%), ENFP (10.6%), and INTP (10.3%). They too found a higher proportion of Intuitive types (N) and a larger number of Intuitive Perceivers (NP). They also found an even distribution of introverts and extraverts which is a higher proportion of Introverts (I) than the normal

population. They also found that males were more inclined towards Thinking (T) and Females were more inclined towards Feeling (F).

Sak (2004) in a comprehensive analysis of the research to date found that the four most common types from the literature for gifted students were ENFP (15.45%), INTP (12.05%), ENTP (11.35%) and INFP (10.41%). The four most common types from a normal population were ESTJ (14.97%), ESFJ (11.97%), ESFP (9.37%) and ISTJ (6.92%).

Myers (1980) also defines combinations of types. For example, she describes those that possess intuition plus feeling (NF) as individuals tending to focus on new possibilities and new projects. Often they have a gift of language that they can use to communicate to a high level. Also, she describes those that possess intuition plus thinking (NT). These tend to be ingenious and successful in solving problems of a special interest citing mathematical, scientific and computing research as examples. They also found that Perceiving types (P) outperform Judging types (J) on aptitude tests. Sak (2004) hypothesised that gifted adolescents could show more of a tendency towards Introverted-Intuitive (IN) types.

Delbridge-Parker & Robinson (1989) found that 50% of the gifted population is introverted compared to 25% of the regular population. Research has also shown that the gifted population has a strong preference for Intuition (N) compared with around 30% of the general population who mostly prefer Sensing (S) (Mills, 1983; Olszewski-Kubilius & Kulieke, 1989; Williams, 1992). The Thinking (T) and Feeling (F) scales can vary across gifted adolescents with Bireley (1991) and Sak (2004)

reporting that gifted females tend to prefer Feeling (F) while gifted males tend to prefer Thinking (T).

Researchers (Mills, 1984; Gallagher, 1990; Williams, 1992; Hawkins, 1997) found that gifted students have a stronger preference for Perceiving (P) over Judging (J). The Atlas Table of Types (MacDaid, Kainz, & McCauley, 1986) indicates that the general population has a preference for Judging (J) over Perceiving (P).

Cross, Spears-Neumeister, & Cassady (2009) believe that the Intuitive personality type (N) reflects a tendency to prefer tasks that involve insight, imagination and inspiration. They also prefer theory courses to fact based ones.

The MBTI plays an important part in this research project. I believe that the literature seems to indicate that gifted students have a different learning style than regular students based on their results in the MBTI (Gallagher, 1990; Moore & Parker, 1996; Swiatek & Cross, 2007). I want to investigate if this is the case in an Irish cohort of academically talented students. If, as I suspect, these different learning styles exist then this has important teaching implications for the high ability student. It may be the case that the learning style of the high ability student is more suited to a university environment than a regular school. The students involved in this study participate in out of school programmes based on a university campus. I want to measure whether their level of academic satisfaction is higher than at school and if the different teaching style on the CTYI programme contributes to this higher academic satisfaction. Using the MBTI in this research allows me to gauge the different learning styles of the students.

Giftedness and Self-Concept

Shavelson, et al (1976) conceptualise self-concept as a person's self-perceptions that are formed through experiences with and interpretations of the environment. The global self-concept is composed of academic self-concept and non-academic self-concept. Some researchers, Piers (1984) and Hoge and Renzulli (1993) use the terms self-concept and self esteem interchangeably while others differentiate between the two (Beane & Lipka, 1984; Falk & Miller, 1998). They describe self esteem as the judgmental component of the self, the value a person places on its various aspects. Demo (1992) describes a distinction between self image and self-concept. Self image is seen in this instance as perception of self over short periods of time that is changeable. Self concept is thus defined as the less changeable aspects of self that describe the individual across situations. As the child grows older these concepts broaden and become more complex (Falk & Miller, 1998; Harter, 1990).

The theoretical frameworks behind the idea of self-concept may be divided into two dimensions: *unidimensional* and *multidimensional*, and Byrne (1996) provides a useful overview. Within the unidimensional field, she points to two models; *the nomothetic model* and *the true unidimensional model.* The nomothetic model regards self-concept as a singular, global perspective, which is made up of several sub-units. The secondary scores are summed, contributing with equal weighting, to produce a global self-concept. (The Piers-Harris Self-Concept scale is based on this model). The *true unidimensional model* is somewhat different, in that it simply calculates one global score (overall self-concept) and does not contain subscales. The items on these

instruments tap into one's global self-concept. From a multidimensional perspective, self-concept is understood to have several aspects that correlate, but each one is individually valid (Byrne, 1996). She identifies six separate models; independent factor model, correlated-factor model, taxonomic model, compensatory model and the hierarchical model.

Hoge & Renzulli (1993) present two theories as to why we may expect gifted students to have a higher self concept than their non gifted peers. Firstly to the extent that high ability is translated into actual accomplishments then we would expect self concept to be higher. Secondly the idea that labelling a child as gifted may increase their self-concept. This view is supported by Cornell (1983) and Savon-Shevin (1989). Hoge & Renzulli also present three counter theories that give us reason to expect a lower self-concept for gifted children compared to their peers. Firstly there is the possibility that high expectations may contribute to feelings of failure with the child never meeting expectations. Secondly there is the theory that because the child is academically advanced they may also be more sensitive to social cues and be more critical of their performance (Freeman 1985). Finally if the child has been identified as gifted and moved into a special class for gifted students they may compare themselves against other gifted students giving them a lower sense of self-concept.

Therefore it is probably unsurprising that research into the global self concept of gifted adolescents compared to the general population has produced mixed results. Studies such as those by Milgram & Milgram (1976); Tidwell (1980) and Kelly & Colangelo (1984) suggest a higher self concept for gifted adolescents in relation to their peers while Bracken (1980); Brody & Benbow (1986); and Hoge & McSheffrey

(1991) show no differences between the two groups. Indeed Forsyth (1987) shows a lower self concept for gifted students in relation to their non gifted peers. In a meta-analysis of the self-concept of gifted children Hoge & Renzulli (1993) found that gifted children had higher self concepts scores than average children but a breakdown by five types of self-concept scores showed that different results were obtained for the five self-concept types. They found that the strongest positive value was for academic self-concept indicating that gifted children exhibited more positive academic self-concepts than their non gifted peers.

Kulik and Kulik's (1982) important study of special programming for gifted students and the effect on self concept found positive effects on seven studies and negative effects on six other studies. Other studies of special programmes for the gifted suggest that there are no differences in self concept that can be attributed to these programmes (Brody & Benbow, 1987; Olszewski, Kulieke, & Willis, 1987) while Schiedner, et al (1989) suggest special programmes may have a negative impact on self concept. Marsh and Parker (1984) argued that gifted students will experience a decrease in academic self-concept upon entering a gifted programme because of a change in reference group. However Rinn (2005) found an increase in academic self-concept of gifted students who participate in special programmes. Sayler and Brookshire (1993) found that accelerated and gifted students had a higher global self-concept than students in regular classes. Recently Hoogeveen, Van Hell & Verhoeven (2009) found that accelerated secondary school students had more positive self-concepts concerning school in general but a lower social self-concept. With specific regard to summer programmes, Kolloof & Moore (1989) found an increase in self

concept of gifted students over a two week period and Parker (1998) found an increase in self concept of creatively gifted students over the same period.

Few studies have been done to measure differences in self-concept between high ability male and female students. There is some evidence that gifted females have a lower global self-concept than their non gifted peers (Kelly & Colangelo, 1984; Mills, 1984; Scheidner, Clegg, Byrne, Ledingham, & Crombie, 1989). However other studies suggest that there is no clear gender differences in the global self-concept of gifted adolescents (Tong & Yewchuk, 1996; Karnes & Wherry, 1981). Rinn (2006) found that both males and females experienced a significant increase in same sex and opposite sex peer relations over a 3 week summer programme.

Some researchers have suggested that gender differences occur in specific dimensions of self-concept while not necessarily being observed in the global score (Harter, 1983; Piers, 1984).

Lewis & Knight (2000) identified seventeen studies that used the Piers-Harris Children's Self-Concept Scale to analyse various populations by gender, age or grade level. Of the 15 studies that included gender as a variable, three described gender differences on global scores, six did not report global scores and six reported non significant results on global scores. Twelve of the studies found gender differences on one of the subscales. Four of these studies focused on high ability students. Tong & Yewchuk (1996) did find that female gifted students have a significantly higher level of anxiety than male gifted students while they found that male students have significantly more behavioural problems. Klein & Zehms (1996) found that older

girls had a significantly lower global self concept than younger girls. This was further enhanced in five of the six subscales, behaviour, anxiety, intellectual status, popularity and happiness. Kanoy, Johnson & Kanoy (1980) found no differences in self-concept between academically bright students in North Carolina and Yong & McIntyre (1991) found no differences between gifted students and non gifted students in southern Illinois. Piers (1984, p.89) also stated that "age, grade and sex differences seem unrelated to differences in self-concept within a gifted group."

Lewis & Knight (2000) in their study of 368 gifted students found that girls significantly rated themselves higher in the subscales of Behaviour and Intellectual and School Status while males ranked themselves significantly higher on the dimension of Anxiety.

The Piers Harris Children's Self-Concept Scale is an important part of the overall research project. I want to use a measure that would gauge the self-concept of high ability students on an overall level and a number of subscales. I am interested to see if the students in this study have a higher academic self-concept than regular students as evidenced in some of the studies from the literature review. I believe the information from the Piers-Harris will add to the data from the questionnaires where I hope to find out where these students perceive they get the highest level of encouragement. I also want to find out what the students perception of being gifted is and I believe that the Piers Harris data will further reveal information about what it feels to be gifted from the perspective of a high ability student.

Conclusion

This section has illustrated how difficult it is to reach a consensus on an agreed definition of giftedness. In trying to define this topic a large number of considerations need to be taken into account. Primarily we need to understand the purpose for which we are identifying the students and we need to be certain that the criteria used identified all the appropriate students. I think the Talent Search model utilized by CTYI in this respect is a good identification tool for the students in this study. The students gain a better understanding of their abilities and an opportunity to experience a greater academic challenge.

The literature had seen the early definitions which favour a one dimensional approach to giftedness develop towards multi-dimensional definitions. I think that a multidimensional approach is a more appropriate one. I believe that we need to look at factors beyond testing, in defining giftedness. These should include environment both at home and school. In the questionnaire designed for this study I am asking the students to talk about their educational experiences on both CTYI programmes and at school. The students are also asked to describe the level of encouragement that they receive in relation to their ability.

It is important to take into account the various factors that make up giftedness or high ability. Again the literature shows little consensus in what makes up these dimensions. While above average ability seems to be a common factor in all definitions, how much above average or what identification procedure one could use depends greatly on the educational philosophy of the researcher. The literature has

moved from the initial idea of one IQ test giving an overall score that constitutes giftedness to domain specific intelligences and the emergence of areas such as creativity, motivation and self-concept as being included in definitions of giftedness. I agree with the notion of a domain specific intelligence but I believe that other factors such as creativity should be included in the curriculum for high ability children and not necessarily in a definition. Areas such as self-concept and motivation are important but only in so much as they relate to the direct experiences of the child. I am using the Piers-Harris Self Concept scale in this regard to look at the self-concept of high ability who have participated in an out of school programme.

There is also the question as to whether giftedness relates to potential or actual achievement. Personally I feel that giftedness is potential achievement but I would qualify that by saying that this potential must be turned into actual achievement by giving students the opportunity to study in out of school programmes. This study will look at the concept of giftedness and intellectual ability from the perspectives of students and parents who have experienced out of school programmes at Dublin City University. I believe that in Ireland, with the absence of pull out programmes and with the lack of any appropriate teacher training to deal with gifted children in the classroom, then out of school programmes are a necessary educational experience for these children. There is a significant gap in the literature for research studies of gifted students in Ireland particularly those who have participated in special programmes and this study aims to add significantly to our knowledge in this area.

There are also very few studies worldwide that look at parent perceptions of their child's experiences on out of school programmes. This is unsatisfactory as I have

already stated that we need to understand multi-dimensional definitions of giftedness to gain a better sense of how these students learn and perform academically. This multidimensional approach needs to look at their home environment as well as their experiences in school and on out of school programmes. Therefore the study designed a questionnaire for parents of these students to describe their understanding of the child's experiences at CTYI and school and also the parent's perceptions of their child's giftedness. This study attempts to address a gap in the literature by conducting a large scale study of parents and students at primary and secondary school who have taken part in special out of school classes for gifted students. As well as completing a questionnaire a smaller sample of parents will be interviewed to get an in-depth look at how they describe their child's experiences and their perceptions of giftedness.

The Myers-Briggs Type Indicator (MBTI) will be administered to students to get an idea of their learning styles. The literature review has shown that high ability students in America have different learning styles than regular students as measured by the MBTI. This has a direct implication of the type of teaching needed for them at school. I believe that the type of instruction available to these students at school in Ireland is not sufficient and that these students need out of school programmes at a university campus in order for them to fulfil their academic potential.

Those with egalitarian philosophies oppose homogeneous grouping of gifted students believing them to be elitist and also believing that gifted students can make it without intervention (Moon & Roselli, 2000). Indeed Oakes (1985) is very critical of special classes believing that other students suffer academically without the presence of gifted students in the regular classroom. I disagree with this idea. Studies by

Robinson (1990) and Silverman (1997) challenge the notion that highly able students need mixed ability students to become more balanced individuals. These studies show that students in special programmes act in a more mature fashion than when in non mixed ability classes. Studies have also shown that high ability students can experience a lack of academic challenge in regular classes (Baker, Bridges, & Evans, 1998) and also that high ability students can have problems with their peers in regular classrooms and become targets of bullying (Moon, Nelson, & Piercy, 1993; Baker, Bridges & Evans, 1998).

This study is designed to answer some of these questions. The questionnaire for parents and students will ask whether the students experience a different level of academic challenge at CTYI compared to school and whether the students have a more positive attitude towards attending CTYI than school. The interviews with selected students and parents will further our understanding of the concept of giftedness in how it applies to a group of students and parents who have experienced out of school programmes for high ability children. The Piers Harris Children's Self-Concept scale will examine the notion of self-concept and how if affects these students and the Myers-Briggs Type Indicator will examine the learning styles of these students and the implications for teaching. The research design employed to achieve these goals will be outlined in the next chapter.

Chapter 3:   Research Design

Introduction

This chapter will set out the research design and methodology that I have followed in pursuing this piece of research. Firstly I will outline the differing philosophical worldviews that dominate the field of research that are relevant to this thesis. Then I will define and review the selected strategies of inquiry that I have selected to pursue my project. From there I will review the methodological conflicts within the gifted literature. Then I will review the nature/nurture debate. This methodological analysis will conclude with a brief review of the current state of research in the area of gifted education. This will lead to a section on using interviews as a form of qualitative research. Finally I will outline the research methods used in this project and why they were most favourable to this research.

The study involved looking at the field of giftedness from the perspective of students and their parents. Firstly I needed to identify a group of gifted students who were attending special out of school gifted programmes at the Irish Centre for Talented Youth at Dublin City University. On finding these I wanted to find out whether gifted students and their parents experienced different levels of satisfaction between school and gifted programmes. I then wanted to look at how gifted students ranked themselves in relation to their peers in school and where they felt they received the most encouragement. I wanted to see if gifted students differed from their parents in this regard and I also want to explore the whole notion of giftedness and how comfortable gifted students and their parents were with the concept of high academic ability and the use of the term gifted to describe this ability. In exploring this question I looked at both primary school and secondary school gifted children and their parents who had recently attended programmes with the Irish Centre for Talented Youth.

Initially the research was conducted using a questionnaire for all primary and secondary participants followed by in-depth interviews with a selection of the candidates.

Competing Philosophical Worldviews

Denscombe (2008) describes positivism as an approach to social research that seeks to apply the natural science model of research to investigations of social phenomena and explanations of the social world. Giddens (1975) makes two assumptions of positivism in relation to social science. Firstly that it implies a stance with the social scientist as an observer of social reality. Secondly the end product of the research is compatible with natural science. Denscombe describes positivism from an epistemological position as relying on empirical observation and that social research needs to use appropriate tools to discover patterns in the social world. From an ontological perspective there is a belief that patterns and regularities occur in the social world as well as the natural world and these patterns and regularities exist independently of whether they are recognised by people.

Cohen, Manion & Morrison (2007) describe interpretivism as characterised by a concern for the individual where the goal is to understand the subjective world of human experience. Creswell (2009) believes that the goal of research in this area is to rely as much as possible on the participants' views of the situation being studied. Questions are open ended and broad giving the participants opportunities to construct the meaning of the situation and giving the researcher the chance to listen carefully to the responses. Denscombe believes that interpretivists believe that from an epistemological perspective it is not possible to gain objective knowledge about social

phenomenon and that humans react to the knowledge produced by being studied. Ontologically interpretivists believe that social reality is subjective and that humans act differently when they are being studied.

Some researchers have been looking for common ground somewhere between the models of positivism and interpretivism (Maxsy, 2003; Johnson & Onwuegbuzie, 2006; Tashakkori & Teddlie, 2003). While there is opposition to this from other researchers who feel that the two are simply polar opposites some empirical social researchers have been moving towards a pragmatic paradigm. Pragmatism as a worldview arises out of actions, situations, and consequences rather than antecedent conditions (Cresswell, 2009). Instead of focusing on methods, researchers emphasise the research problem and all approaches to solve this problem (Rossman & Wilson, 1985). Pragmatism is a philosophical underpinning for mixed methods studies.

Tashakkori and Teddlie (1998, p. 21) believe that

"pragmatists consider the research question to be more important than either the method they use or the worldview that is supposed to underlie the method. Most good researchers prefer addressing their research questions with any methodological tool available."

Although the theory might say that positivism and interpretivism are incompatible Denscombe (2008) believes that in practice social researchers tend to pick from the array of methods at their disposal. For example they may use a questionnaire if it suits the study or an interview if it adds to our understanding of the problem. Denscombe states that good social research depends on adopting an approach suitable for the topic being investigated.

Mixed methods are used as a selected strategy of inquiry for those who subscribe to the pragmatic worldview. Tashakkori and Teddlie (1998) believe that the results from one method can help identify participants to study or questions to research for the other method. Alternatively Creswell & Piano Clark (2007) noted that the qualitative and quantitative data could be merged into one large database used beside each other to reinforce results. Triangulation provides social researchers with a means for assessing the quality of data by coming at the same research problem at a different angle. So by combining elements of qualitative and quantitative research it is possible to triangulate the findings.

Creswell (2009) mentions three general strategies of inquiry that can be used with mixed methods. These are sequential mixed methods; concurrent mixed methods and transformative mixed methods. Transformative mixed methods procedures are those in which the researcher uses a theoretical lens as an overarching perspective within a design that contains both quantitative and qualitative data. Concurrent mixed methods procedures are those in which the researcher merges quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. In this design both sets of data are collected at the same time. Finally and perhaps most relevant for this piece of research is sequential mixed methods where the researcher seeks to expand on the findings of one method with another method. This may involve beginning with a quantitative method to test a concept and then to follow this up with a qualitative method of detailed exploration of a few cases.

Methodological Conflicts in the Gifted Literature

I believe the answer to the question of method and design lies within the notion of giftedness and whether it should be investigated through the positivist or interpretivist paradigm. To better illustrate this point I will demonstrate how historically the notion of giftedness has been intertwined with positivism but laterally researchers have become to investigate the concept through a postpositivistic lens.

Coleman, Sanders and Cross (1997) wrote a paper exploring the emerging philosophical war in gifted education among advocates of differing perspectives of social research. They discuss three modes of disciplined enquiry that dominate the field of gifted education, empirical-analytic, interpretive and transformative. Each of these paradigmatic systems has its own goals, what Habernas referred to as knowledge-constitutive interests, and the extent to which a theory furthers the goals is a primary criterion in determining the goodness of a theory. Coleman (2003) describes the goal of inquiry in the empirical-analytical paradigm as one of prediction and control. In the constructivist paradigm, inquiry should lead to interpretation and understanding. In the transformationalist paradigm the goal of enquiry is to change the social world. People who believe in the empirical-analytic mode of inquiry see the universe comprised of universal natural laws that scientists discover (Popkewitz, 1984). Valle and King (1978) describe the behavioural psychologists within the empirical-analytic mode as assuming the notion that a phenomenon must be observable, measurable and appear that its essence can be agreed upon by more than one observer. This mode of inquiry is based on the idea that the methods employed in

the physical sciences can be used to study human beings and their institutions making little distinction between object and people as the subject of research. This model is a modification of positivism and Coleman, Sanders and Cross argue that the field of gifted education has tended to use the empirical-analytic mode while ignoring the possibilities inherent in other research forms. Bryman (2004) describes positivism as an epistemological position that advocates the methods of the natural sciences to the study of social reality and beyond. In relation to giftedness talents and abilities are defined by standardized tests. Identification of gifted children is based on objective measures and programmes are based on a consistent set of experiences across educational settings. Analysis has shown that most of the research in the field is dominated by the empirical-analytic mode (Coleman, Cross, and Sanders, 1992).

Heller and Ziegler (2000) point out that historically the concept of giftedness was related to positivism and the Three Phase Model proposed by Auguste Comte. Heller and Ziegler describe the three states of positivism and link them to the development of giftedness through the ages. In the first phase, the theological state, man interprets the worldly phenomenon as gifts from the gods. In ancient Greece divine intervention was often interpreted as the cause for heroism or high intelligence. In the second phase, the abstract state, the causes of all worldly phenomena exist outside the physical world and are secure from empirical encroachment. During the middle ages the belief was spread that exceptional achievements were the result of extra-sensory causes and that a genius was an entity in a state removed from that of normal comprehension. Metaphysically oriented explanations for giftedness have been common constructs in scientific theories and can still be found in theories today. A prominent example would be of 'blue blood' ascribed to the aristocracy in medieval

class society which served to legitimise their social superiority and spiritual claim to leadership. Only with the dawn of psychology and the consequent development of methodological standards could the explanation of giftedness gradually enter the third phase. In this third phase, the scientific or positive state, a controlled empirical approach is incorporated into the investigation. From a historical perspective the work of Galton and Binet can be credited with leading giftedness research into the realm of positivism. The same applies to the Terman studies. The belief that IQ can be measured and that it differs from person to person in gradients led to a large amount of quantitative research in this area.

Bryman (2004) views interpretivism as a term that usually denotes an alternative to the positivist orthodoxy that dominated for decades. It is predicated upon the view that a strategy is required that respects the differences between people and the objects of the natural sciences and therefore requires the scientist to grasp the subjective meaning of social action. Its intellectual heritage includes Weber's notion of Verstehen; the hermeneutic-phenomenological tradition and symbolic interactionalism. Von Wright (1971) has depicted the epistemological clash as being between positivism and hermeneutics. This clash reflects a division between an emphasis on the explanation of human behaviour that is the chief ingredient of the positivist approach to the social sciences and the understanding of human behaviour that is used in hermeneutics. The interpretivist mode applied to giftedness sees knowledge of the world as being mediated by the signs and symbols people use to interpret the world. Knowledge is viewed as subjective and what can be learned is how others understand the world. Giftedness means different things to different

people and the interpretivist researcher sees outcomes that come about as a result of dialogue among the participants and these outcomes change as time goes on.

The transformative mode researcher sees knowledge of the world as being embedded in a cultural matrix of values. All human behaviour is locked into a web of power relationships grounded in struggles around gender, race, social class and other culturally determined parameters. The transformative mode sees giftedness as being defined according to the qualities valued by the powerful and influential. This would result in less minority groups being identified for gifted programmes.

That there is a definable group is a cornerstone of the empirical-analytic mode. Terman and Hollingworth base all their theories around it. The gifted have a separate set of characteristics that determine them from other groups. In the interpretivist mode gifted persons can be defined by all groups according to their own set of attributes. There is no universal group. In the transformative mode gifted persons are defined by attributes that reproduce the dominant values of race, class and gender. To the empirical analyst the gifted are identified using standardized measures. To the interpretivist and the transformforativist there is no universal identification and cultural contexts influences identification. Later literature is now dominated by interpretivist methods including the work of Sternberg and Renzulli.

Furthermore Borland (1990) briefly describes the positivist paradigm in terms of five areas-ontology, epistemology, generalization, causality and values. Borland comments (p.162) that "we have argued among ourselves who has the true definition of giftedness" and contends "the reality of giftedness is constructed by each of us; it

does not exist apart from human cognition". White (1999) takes up this point further by stating that educators and parents need to beware of the philosophical roots of the theories behind gifted education pointing out that every time an important decision is made within a gifted program the decisions and actions often rest on a complex and typically tacit theoretical foundation.

Borland (1997) follows up on his earlier work by arguing that while the brain is a physical entity, intelligence is a socially constructed concept. Sapon-Shevin (1994) goes so far as to question whether giftedness exist at all stating (p. 17) that giftedness "only exists within a system that for a variety of reasons wishes to measure, select and sort students in this manner."

Consequently Borland (1990, p. 162) believes that the giftedness concept as defined by positivism is "based upon invalid notions about the nature of reality and enquiry". Borland (2003) further expands this point by tracing the growth of the giftedness movement to the advent of psychometric testing as advocated by Binet and Terman. Using the work of Foucault (1995) as a guide Borland suggests that the process of defining intelligence was an enactment of the power of the educational system to identify gifted children who were to be especially nurtured because it was in the national interest or because it was believed that their exceptionality demanded it as a matter of justice. This would be done at the expense of children who could be marginalised and excluded from the benefits of a public education. One way of developing power within the educational system is through psychometric testing, using measurement as a way to control students not only by quantifying and ranking them but also by reminding them that they are being constantly observed and

watched. In the early 20th century as children began to be arrayed along the IQ continuum, Foucault (1995) observed that one's internal knowledge of being observed and judged became the medium through which power and control was enacted.

I think that if we believe in a multidimensional definition of giftedness as incorporating innate ability and environmental factors then it is inappropriate to use one particular research method over another. I believe that this lends itself to using both positivistic and interpretative methods. As the students in this study were mostly identified using an out of level test then this is a quantifiable measure which can be examined using a positivistic study. This survey can allow us to gain a greater understanding of a large group of gifted students. However the positivistic study can only guide us so far so we need to use a qualitative study to further our understanding of the concept. This allows us to ask richer questions to the participants who can use their own words and interpretations to describe their experiences.

For the purpose of this research we will use different methods to gain a great understanding of giftedness from an Irish context. Using quantitative data we will look at giftedness in a positivistic study and then we will follow this up with interviews which will examine giftedness as a socially constructed concept from the perception of the participants.

The Nature/Nurture Debate

Armenta (1999) proposes approaching giftedness as an identity issue. She believes that essentialism was at the foundation of the gifted field. In this model some people were gifted while others were not. These were the foundations of Terman's theory.

Tannenbaum (1983) stated that gifted children have a right to be identified at the earliest possible age. Renzulli (1986) included task commitment in his definition of giftedness. Armenta sees this is a non essentialist principle. It leads to discussion around the temporal definition of giftedness and whether it lasts over time.

This brings us to the nature/nurture debate. Are talented individuals born with their ability or do environmental factors influence how a person performs? Those people who believe that your ability is genetically endowed and that it usually remains constant throughout life believe in the nature theory. Individuals who believe that certain kinds of environmental experiences may be a factor in allowing a gifted person to reach their potential fall into the nurture side of the theory. It is not unreasonable to believe that early experience at home and school may instill the motivation and persistence necessary to exploit one's ability. Creative potential also seems to be fostered by exposure to role models and mentors within one's chosen domain of creative activity. One of the age old questions regarding intelligence is whether giftedness is something that is genetically inherited or that comes about from the environment that the child finds himself dealing with on a day to day basis. Howe (1999) perhaps summed it up best by stating that high IQ most frequently results from children with the necessary neurological predispositions who are also provided with the opportunities to learn and explore new materials.

Galton (1869) in the nineteenth century observed that gifted individuals tended to come from families that had other gifted individuals. Galton along with Charles Darwin were very influential at this time and subscribed to the belief that intelligence is something that can be bred. The nature theory of intelligence was born from these ideas. In the 1920's and 30's there was a shift away from the nature theory with the

belief that intelligence may be linked to social class rather than race. In the 1960's the wheel had almost turned full circle as the reason for differences in intelligence test scoring was centred on social determinants. Poor living conditions and poor schooling systems were leading to underachievement (Colangelo & Davis, 2003). This would have been linked to the Civil Rights movement in the United States at the time. Efforts were made to improve the access that people have to education and to create an environment where everyone could reach their potential. Recently however the whole controversy of nature versus nurture was raised again by Herenstein and Murray (1994) with the publication of their popular book "The Bell Curve" They reasoned that measured IQ is largely genetically inherited and that intervention in the form of special classes for underachieving groups were largely a waste of money.

Gottfredson (1997) includes a statement signed by 52 experts in the field who agree that intelligence has a genetic component, that real differences in intelligence exist, that these can be measured by intelligence tests and that intelligence influences your options in later life. This would indicate that intelligence can be measured using the normal curve. In contrast to this the shape of the normal curve of intelligence has been challenged (Robinson, Zigler, and Gallagher, 2000). They believe that the normal distribution ends at the bottom end of the scale at IQ 70 and perhaps more significantly for this research they believe the distribution at the high end of the scale can go up to well over 200.

People in favour of nature would point to studies of twins by Bouchard et al (1990) who found positive correlations between twins and their IQ scores. Devlin, Daniels and Roeder (1997) argues that inheritability accounts for 48% of IQ scores. Advocates of the nurture theory would point to the Flynn effect (1984). Simply stated

Flynn noted that IQs are rising all the time and average IQs over the world had risen by 15% since 1945. Flynn put this down to the fact that young people were being more exposed to more visual entertainment which would be similar to the visual puzzles in an IQ test. This would be a strong indicator of the nurture theory of intelligence.

Monks & Katzko (2005) point out that even Terman who was one of the champions of the g factor of intelligence and of IQ as the main contributing factor of giftedness, later conceded that personality dimensions and a supportive environment were of important consideration in the make up of a gifted person. Given that there seems to be a lot of discrepancies about the effectiveness of IQ in the literature then I would believe that it should not be the only factor for inclusion in a special programme. I do think though it would be somewhat churlish to dismiss IQ out of sight as it has proved to be a general if not completely reliable indicator of high ability over the years. As some form of testing whether it is IQ, or class tests or out of level test, seems to be the only current objective measure of identification for gifted students then it is difficult to imagine a programme functioning without using some form of testing as a means of identification.

However it is important to look at other factors as well. I am very interested in whether gifted students, however they are identified actually benefit from out of school programmes. I believe that out of school programmes fall in the nurture category of the nature/nurture debate. I think if we can get over the means of how we identify students for a particular programme and move towards how we evaluate the effectiveness of a particular programme then we can see what is the most appropriate method for working with high ability students. This study is designed to examine the

benefits of out of school programmes from the perspective of the students and their parents.

Current State of Research in the Area of Gifted Education

From the previous chapter we have seen that in modern times conceptions of giftedness are no longer one dimensional with a reliance on IQ. These theories seems to favour multidimensional models of intelligence, for example see Gardner, Sternberg and Renzulli. These new cognitive approaches were a marked contrast to previous psychometric measures and led to a number of interpretive, qualitative studies of the concept of giftedness. Borland (1990), Cross (1994) and Coleman, Sanders and Cross (1997) point out that most of the research in gifted education is in the positivist paradigm with small but slowly growing bodies of research coming from other approaches such as constructivism, critical theory and a variety of qualitative methodologies. Albert (1969) concluded that between 1927 and 1965 there was a shift away from the terms genius, eminence and distinction and a move towards creativity and giftedness. He also found that the focus of research had moved from pathology to personality dynamic and cognitive processes. Friedman-Nimz ,O'Brien and Frey (2005) conducted a comprehensive study of 28,000 articles in the field that had been published since 1969 following on from Albert's study. Trends from these articles included an increase in the number of articles about creativity; a rise in the number of process-oriented articles; and a small but steady increase in the number of articles employing qualitative research. A significant number of articles still used IQ or an equivalent as the identifier of giftedness within the studies. Meanwhile Gardner (1993) expanded the notion of intelligence into brain based domains reflecting ways of knowing by adding dimensions of creativity, expertise and genius and Sternberg (2000) also attempted to enlarge the concept of high ability to include wisdom as a

domain for giftedness. The difficulty of adapting Gardner's and Sternberg's intelligence theories to serious examination often reveals that many of the intelligences that they suggest are hard to quantify. Gottfredson (2003) believes that four of Gardner's intelligences (linguistic, logical mathematical, spatial and musical) are in her opinion subsections of the "g" factor of intelligence.

Coleman, Dabbs and Guo (2007) research the state of qualitative research in gifted education as published in American journals between 1985 and 2003. This piece is a welcome addition to the literature because of its emphasis on the need to use different methods and criteria in terms of how we classify the experiences of the gifted child. This article noted that the first paper incorporating qualitative research in gifted education only appeared in 1985 and then there was no other until 1990. Since then there has been huge growth in the amount of research published using this method. Between 1996 and 2000 qualitative research became more popular and studies were made of underserved populations within gifted education including minority groups, gifted underachievers and twice exceptional students (gifted students with a learning difficulty).

Cross (2003) explores giftedness by drawing on a phenomenological approach to lived experiences. She believes that during the time of Terman's studies (1925-29) the mechanistic paradigm was the basis for research in psychology and education. The underlying ontological and epistemological assumptions of this paradigm shaped the conceptions of giftedness and gifted students. Armed with its primary tool – the IQ test it wedded gifted education to the empirical-analytic mode that pursued cause and effect relationships. Instead of looking at gifted research in this fashion Cross

suggests looking at giftedness through a lens of phenomenological inquiry. Phenomenology was developed by Husserl with the goal of enabling a clear and unbiased study of human consciousness and experience by describing the structures of experience as they present themselves to consciousness without recourse to theory, deduction or assumptions such as in the natural sciences. Phenomenology is based on the premise that reality consists of objects and events as they are perceived in the human consciousness. The two important concepts underpinning phenomenology are lebenswelt and epoche (Husserl, 1962). Lebenswelt is Husserl's term for a person's pre-reflective experience. Epoche is the process of bracketing presuppositions prior to conducting a study as a way to let the phenomena speak while holding at bay any presuppositions that are in force in any situation. Cross believes that gifted education would be different if researchers conducted phenomenological studies of subgroups of gifted students. Lived experiences of the students would become the starting point for inquiry and formal identification procedures would follow and validate the descriptions. This is in contrast to using IQ to formally identify the students in the first place.

Coleman, Dabbs and Guo (2007, p. 54) believe that in order to do qualitative research the "researcher must do paradigmatic-oriented research." This involved more than applying a method to a set of data. Rather it involved looking at the data to extract the meaning from the participants from their own perspectives. They examined 124 supposedly qualitative studies published in the major gifted journals between 1985 and 2003 and found only 40 consistent with the qualitative paradigm that they defined. The others studies were more quantitative in nature and used only qualitative methods to supplement the predominantly quantitative findings. Of the actual

qualitative research in gifted education Coleman, Dabbs and Gao found that this mostly took the form of participant observation, interviews and the study of physical evidence. Most who published in the journals tended to use a combination of all three procedures.

I am inclined to agree with Coleman, Dabbs & Guo's (2007) opinion that we need to use different methods to classify experiences of the gifted child. I think that by just using quantitative research methods, we do not get a full picture of this experience. I also was influenced by Borland (1990) and Coleman, Sanders & Cross (1997) who stress the need for a more interpretative approach to research in relation to gifted students. As part of my study I want to examine the lived experience of students and parents who had participated in out of school programmes. I feel now that only using a questionnaire and conducting a solely positivistic study would not be enough to measure these experiences so the literature has influenced me to look into some qualitative research as part of this thesis.

Interviewing Methodology

As a portion of the research involved interviewing I have included a brief analysis of the methodological procedure that I followed relating to interviews. Merriam (1998) uses the term basic or generic qualitative study where the researchers seek to discover and understand a phenomenon, a process or the perspectives and worldviews of the people involved. This basic study draws from concepts and theories of educational psychology, sociology or cognitive psychology. Data is usually collected through interviews, observation or analysis of documents. Findings can be a mix of

description and analysis and the analysis usually results in the identification of recurring patterns that cut through the data.

For the purpose of this study I used Mason's (2006, p. 72) overview of the planning and preparation procedure for qualitative interviews which is illustrated in the table below.

Table 3.1: Planning for Interviews

Step 1 Big research questions	Step 2 Mini research questions	Step 3 Possible interview topics and questions	Steps 5 & 6 Loose interview structure or format, including any standardized questions or sections

Step 4 Cross-reference	Step 7 Cross-reference
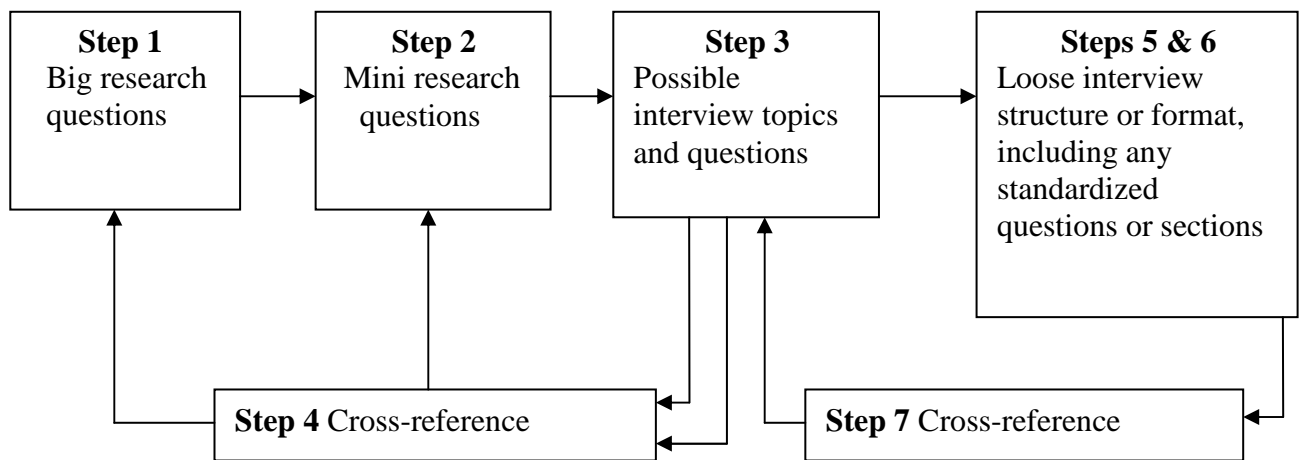
The main purpose of an interview is to obtain a special kind of information. Patton (1990) describes an interview as a way of finding out things that we can't directly observe. He believes the purpose of interviewing is to allow us to enter into the other person's perspective. LeCompte and Preissle (1993) list six types of interview: standardized, in-depth, ethnographic, elite, life histories and focus groups. Lincoln and Guba (1985) add structured interviews to this list and Bogdan and Biklen (1992) add semi-structured interviews. Patton (1980) outlines four types of interview: informal conversational interview; interview guide approach; standardised open ended interviews and closed quantitative interviews. Lincoln and Guba (1985) believe that structured interviews are better when researchers are aware of what they do not know and therefore are in a position to frame questions. Consequently when

researchers are unaware of what they do not know and are relying on the respondents to tell them, an unstructured interview is more useful. For this research I used the semi-structured interview with open ended questions. I wanted to do this because I intended to have a consistent set of questions that I would ask to all the participants so that it would be easier to identify themes as they arose. However I deliberately kept the questions in an open ended format so that different strands could emerge from the data and that the participant would be free to discuss in detail any information that was important to them. This format was also suitable for this research as I was conducting all the interviews myself so I was able to have some sort of structure before each interview that I would try to follow in each case. The structured interview is where the content and procedures of the interview are organised in advance. The sequence and wording of the questions are determined by a schedule and the interviewer is left little freedom to make modifications. The unstructured interview is a more open situation with the interviewer having greater flexibility and freedom. An interview schedule for a semistructured interviewed should include: the topic to be discussed; the specific questions to be put for each topic; the issues to be discussed; a series of prompts for each topic. The interview schedule and transcripts of the interviews used in this research are listed in Appendix C.

One of the main problems with data analysis from a qualitative perspective is putting large amounts of data in a readable and manageable format. One procedure for doing this is content analysis where many words of text are classified into fewer categories. Krippendorp (2004) describes content analysis as a research technique for making valid inferences from texts. Anderson and Arsenault (2001) suggest that content analysis can also describe the relative frequency and importance of topics as well as

to evaluate bias and prejudice. Cohen Manion & Morrison describe content analysis as taking texts and placing them in summary form through the use of pre-existing categories and emergent themes in order to generate a theory.

Ezzy (2002) and Anderson and Arsenault (2001) suggest the starting point of content analysis as breaking down texts into units of analysis. At this stage coding takes place where categories of data emerge and then analysis of these units take place where the researcher can draw theoretical conclusions from the research. Miles and Huberman (1984) describe creating units of analysis by ascribing codes to the data. A code is a word or abbreviation sufficiently close to that which it is describing that the researcher can see at a glance what it means. By coding the data the researcher is able to detect frequencies and patterns that may occur in the text. Merriam describes coding as nothing more than assigning some sort of shorthand designation to various aspects of data so that it can be easily retrieved. Categories are the main groupings of constructs of a text. Robson (2002) argues that content analysis is dependent on the categories that are defined. Some categories will be mutually exclusive but more common items are assigned to more than one category which maintains the richness of the data. Cohen, Manion & Morrison describe a code as a label for a piece of text while a node is a category where different codes fall. Miles and Huberman suggest that it is possible to keep up to 90 codes in the working memory but they suggest that some data may be recoded on a second or third reading. Guba and Lincoln suggest four guidelines for developing categories that are both comprehensive and illuminating. Firstly the number of people who mention something or the frequency it is mentioned shows an important dimension. Secondly the audience are also important in developing categories. Thirdly some categories will stand out because of

their uniqueness and therefore should be maintained. Fourthly certain categories my reveal areas of inquiry not otherwise recognised.

For this research I used Anderson and Arsenault's method of content analysis, Miles and Huberman's suggestions for coding and Guba and Lincoln's guidelines for developing categories of data.

Research Design and Methods used in this Project

Most of the methodological and philosophical debate that exists in the literature exists as a result of a problem with the definition of what giftedness is and whether it can be measured adequately. Much of this conflict stems from the most quoted definition within the field, the Marland Report (1972). Coleman (2004) describes this report as a broad, inclusive Christmas-tree definition that met some demands of the conflicting parties and was politically feasible. The advocates for intelligence, creativity, achievement, social-cultural related giftedness, psychology, and education were happy initially but ultimately wanted more recognition. The Marland definition mixes abilities, talents, and domains into one stew and the conflicting parties are now threatening to boil over. The perennial debate over whether IQ is an adequate measure of giftedness splits the field into the scientific, quantifiable, positivist style researchers on the one hand and the interpretivist, constructivist side on the other. From an ontological perspective if one holds an objectivist view that gifted exists as a separate entity that can be measured by IQ testing then the epistemological orientation that you will swing towards will be that of positivism. Traditionally giftedness has been researched in this form since the time of Terman. The reasoning here is deductive and implies a testing of the theory. Recently though modern theories of giftedness have presented another ontological assumption which is that of

constructivism. In this perspective giftedness exists but is dependent on the social context that it is researched. Looking at giftedness in this fashion sees multiple forms of giftedness that are developmental and process oriented and dependent on a number of factors. Researchers who perceive giftedness in this fashion are coming from an interpretivist epistemological orientation. Others believe that giftedness marginalises the disadvantaged and minority groups within society. These critical theorists form the transformative paradigm looking to change existing measures for identification of students for gifted programmes and in some cases the very programmes themselves.

Coleman, Cross and Sanders (1997) maintain that despite the seemingly conflicting nature of the theories of empirical-analytic, interpretative and transformative modes of inquiry that there is room for all of them within the giftedness paradigm. They make three seemingly contradictive statements about the nature of giftedness that demonstrates the need for the use of mixed methodology within the field.

1. Universal definitions are possible; and culturally relevant definitions are the most valid.
2. Objective measurement is possible, useful and desirable; and culturally relevant forms of measurement are the most valid.
3. The development of proper assessment devices and procedures will relieve and maybe eliminate, the problem of identifying minority children who are gifted and talented.

From my perspective I am working within an organisation that is dominated by standardised testing as a form of identification and is drenched in the positivist

tradition. Most of the students that I will be researching have been identified through standardised testing procedures. Initially the study lends itself to one of positivistic inquiry. Having access to a large number of students who have been independently identified gave me an opportunity to do a large scale study on the area of giftedness. No other such study has ever been made of gifted individuals in this country. The data would be collected through a questionnaire distributed to parents and students of both primary and secondary school who have participated in programmes with the Irish Centre for Talented Youth. Students and parents would be asked to describe their level of academic satisfaction with CTYI and with school and also to state how they rank themselves relative to their peers in school in various subjects. The initial study would also cover levels of encouragement that the students received from various sources and their level of comfort with their ability. It concludes with their overall conceptions of the term gifted to describe this ability.

The Myers-Briggs Type Indicator and the Piers Harris Children's Self-Concept Scale were administered to students on the secondary school CTYI summer programme to determine individual learning styles and self-concept measures for these students. For further details on these instruments see Chapter 1 and Chapter 4 of this thesis.

Once the questionnaires were analysed some key themes emerged and then I decided to embark on a series of interviews with participants at all levels of the programme. This would include 6 students on the primary CTYI programme, 6 students on the secondary CTYI programme and 6 primary school parents and 6 secondary school parents. These interviews would be semi-structured but would allow open ended questions for students and parents to describe their lived experiences of being a gifted

child or the parent of a gifted child. The research approach would be using the sequential mixed methods strategy as proposed by Creswell (2009) and described earlier in this chapter. By looking at giftedness from both a quantitative and qualitative perspective a greater understanding of the subject and the participants can be achieved.

Research Tools

Questionnaire 1: Primary School Students and Parents

A questionnaire was administered to 500 parents and students who had completed the CTYI Saturday classes in Spring of 2007. The students were aged between 8 and 12. A separate questionnaire was issued for students and parents to ascertain whether they had different opinions in relation to academic satisfaction with class at CTYI compared to school and in relation to their perceptions of being identified as gifted children and to their parents perception of this and to their attitudes towards academic ability and independent study. This questionnaire was sent out by post to the parents of the students after they had completed a term of 9 Saturday classes. Some 268 student and 268 parent questionnaires were returned indicating a response rate of 53.6%. A copy of both questionnaires can be found in Appendix B.

Questionnaire 2: Secondary School Students and Parents

A questionnaire was administered to 450 parents and students who had completed the CTYI Saturday classes in Summer of 2007. The students were aged between 12 and

16. A separate questionnaire was issued for students and parents to ascertain whether they had different opinions in relation to academic satisfaction with class at CTYI compared to school and in relation to their perceptions of being identified as gifted children and to their parents perception of this and to their attitudes towards academic ability and independent study. This questionnaire was sent out by post to the parents of the students after they had completed the summer programme. Some 240 student and 240 parent questionnaires were returned indicating a response rate of 53.33%. A copy of both questionnaires can be found in Appendix B.

Myers-Briggs Type Indicator

The Myers-Briggs Type Indicator was administered to 400 CTYI students aged 12 to 16 who attended the CTYI Summer Programme in 2008. This 400 was comprised of 200 males and 200 females.

Piers-Harris Self-Concept Scale

The Piers Harris Children's Self-Concept Scale was administered to 300 CTYI students aged 12 to 16 who attended the CTYI Summer Programme in 2008. This 300 comprised of 148 males and 152 females.

Interviews with selected participants

Interviews were conducted with 6 primary school CTYI students in Spring 2009 and 6 primary school parents in Spring 2009. Interviews were conducted with 6 secondary

school CTYI students and 6 secondary school CTYI parents in Summer 2009. Interview transcripts are available in Appendix C.

Reliability and Validity

The validity of the questionnaires was tested by giving prepaid envelopes to return the questionnaire and a phone follow up to participants. Reliability for the questionnaires was tested by allowing it to be viewed by members of the School of Education Studies in DCU and gifted experts in London and Johns Hopkins University for amendments. It was then piloted with a small sample. The questionnaire was then submitted to the DCU Ethics Committee for review before being sent out to participants. The validity of the interviews were enhanced by the Plain Language Statement and the Informed Consent Form that were given to participants acknowledging any potential bias from the researcher. Reliability was improved by using a semi-structured interview with the same interviewer performing all interviews. The Plain Language Statement and Informed Consent Form used in this thesis are available in Appendix D.

The Myers-Briggs reliability and validity has been well documented (see Carlyn 1977; Cross et al 2007). The Piers Harris also has been well researched for validity and reliability (see Wolf et al 1982; Piers & Herzberg, 2002).

Research Ethics

Denscombe (2008) talks of ethical issues with research as being concerned with the question of whether due consideration has been given to the rights and feelings of those affected by the research. He proposes three issues that need to be addressed in relation to this. Firstly he proposes that where possible the research should avoid any deception or misrepresentation in its dealings with the subjects. Secondly he states that the researcher should try to protect the interests and identities of those involved in the study. Finally he believes that the researcher where possible should be able to guarantee the confidentiality of the information given to the researcher.

In this research I was able to ensure that Denscombe's three issues were addressed. Before I embarked on the study I worked with the Office for Vice President of Research where the Ethics Department in Dublin City University read my initial proposal. At this stage I outlined what I hoped to achieve in the study. I was advised to firstly prepare a Plain Language Statement where I was able to clearly state the aims and objectives of the research. This was distributed to all potential participants and is available in appendix D of this study. In the Plain Language Statement the potential participants were informed that their anonymity would be maintained and that all their responses would be treated in the strictest confidence.

The Plain Language Statement also reflected any potential bias that I may have had by conducting this piece of research. The feedback that I received from my initial proposal was that I needed to make reference to the fact that I am currently working as Director of CTYI and part of the research would be used to evaluate the classes at

CTYI in which the parents and students would be participating. I noted also that my supervisor Dr Gerry McNamara was hugely experienced in programme evaluation so that this would minimise the potential bias and that the potential participation and non participation would have no impact of the parents or child's future relationship with CTYI or DCU.

Creswell (2009) proposes the use of a Purpose Statement which effectively is a Plain Language Statement. He believes that a mixed methods purpose statement contains the overall intent of the study, information about the quantitative and qualitative strands of the study and a rationale of incorporating both strands to study the research problem. In my own Plain Language Statement I outlined that the research would involve the completion of a questionnaire followed by a possible taped interview which outlines the quantitative and qualitative nature of the research.

Sarantakos (2005) proposes the use of an Informed Consent Form for participants to sign before they engage in the research. Within the informed consent form Sarantakos indicates that the researcher should include the identity of the researcher; how the participants would be selected; the purpose of the research; the level of involvement of the participants; the potential benefits of the study; a guarantee of confidentiality; the right for a participant to withdraw; and the contact details of the researcher and the host institution. In my dealings with the Ethics Department I devised an Informed Consent Form for this study which addressed the issues raised by Sarantakos. A copy of the Informed Consent Form used in the study is available in Appendix D. On the form I included my own details, outlined the purposes of the research, informed potential participants that they had been selected as they had either attended classes at

CTYI or that they were parents of children who had attended classes at CTYI. The participants were told that they would need to complete a questionnaire and that they may be called for an interview to follow up on the results from the questionnaire. The participants were informed that the study was being undertaken to gain a greater understanding of the education of gifted children. Participants were told that their answers would be treated in the strictest confidence, that their anonymity would be guaranteed and that the results would be stored safely at Dublin City University where I would be the only person to have access to the data. Participants were given the right to withdraw at any stage and my details along with those of the Office for Vice President of Research were provided. All potential respondents were given a series of questions relating to the Plain Language Statement to ensure that they fully understood the nature of the study.

Cohen, Manion and Morrison (2007) highlight some ethical issues relating to questionnaires concerning the participants including the issue of informed consent; the right to withdraw; whether completing the questionnaire would have benefit for the participant; the confidentiality and anonymity of the participants; and the avoidance of bias. Following my interaction with the Ethics office in DCU, I believe that the Informed Consent Form and Plain Language Statement used in this study address all these issues. Cohen, Manion and Morrison also make reference to some ethical issues relating to interviews. Most of the issues were the same as those from ethical issues in questionnaires and have been addressed already. They also add an issue in relation to verification of the transcripts. The participants involved were given a copy of the transcript of the interviews to review before I undertook to analyse them

so that they were happy with the final contents. All students and parents verified the transcripts in this study.

Finally the Ethics office suggested issuing a different Plain Language Statement and Informed Consent Form for the parents and students involved in this study. This would involve putting the children's consent form and language statement in a format easier to understand by the children themselves. As all of the students were high ability and most had excellent verbal skills only small changes were suggested to both forms. The Children's Plain language statement and the Children's Informed Consent Form are contained in Appendix D.

Conclusion

This section outlined the research design and methodology used in this research. The mixed methods strategy employed draws from the two conflicting paradigms within the gifted research area. The large scale quantitative study allows us to gain a greater understanding of the students and parents participating in out of school programmes for high ability students in Ireland. It is the first study of its kind in this country. The in depth interviews of students and their parents allows us to gain valuable information from participants on these programmes about their individual conceptions and feelings about special programmes for gifted children and how it compares to school. It also offers opportunity to further investigate the wider issues around intelligence and the nature of giftedness

The next chapter will look at the results from the 5 pieces of research that were carried out with this group. These results will lead us back to the research question of finding out more about out of school programmes for high ability students from the perspective of the students themselves and their parents. I have decided to document and analyse the results thematically from the major themes that emerged from the qualitative interviews. These themes were: Attitude to Attending CTYI and Reasons for Attending; Level of Academic Satisfaction and Challenge at CTYI; Attitude and Academic Challenge at School; Ranking and Ability at School in relation to Peers; and Comfort with Ability and Comfort with term Gifted.

By documenting the results from a thematic perspective it allows us to see how each of the pieces of the research impacted on the study as a whole. By analysing them in the same fashion I was able to correlate the different pieces of research and embed them in the overall study. Each piece of research significantly added to the overall findings. These results and findings give us a new insight into gifted children and their parents and will significantly add to our understanding of this group as a whole from a research and policy perspective.

Chapter 4: Results

Introduction

There were five pieces of research conducted as part of this study. Firstly the primary school questionnaire was sent to parents and students who had participated in CTYI Saturday classes. Then the secondary school questionnaire was sent to parents and students who had participated in CTYI Summer programmes. The following year students on the summer programme completed the Myers-Briggs Type Indicator and the Piers-Harris Children's Self-Concept Scale. Subsequently interviews were conducted with 24 participants who represented both primary school students and parents and secondary school students and parents. From these interviews five significant themes emerged. These were: Attitude towards attending CTYI and Why they Attend; Level of Academic Satisfaction and Challenge at CTYI; Attitude and Academic Challenge at School; Ranking and Ability at School in relation to Peers; Comfort with Ability and Comfort with term Gifted. The next sections will document the results from the five pieces of research under the headings of the emergent themes. The results will be documented separately within the pieces of research in this chapter and analysed collectively in the next chapter.

Section 4.1: Primary School Results

Primary School Questionnaire

This section will analyse the responses from the two sets of questionnaires that were posted out to parents and students who participated in the CTYI Saturday classes for primary school children.

Theme 1: Attitude towards attending CTYI and Why they Attend.

82% of the parents surveyed said their child had a very positive attitude towards attending CTYI. A further 15% said their child had a somewhat positive attitude towards attending CTYI. This is illustrated in the graph 4.1.1. 75% of the students said they had a very positive attitude towards attending CTYI and a further 19% said they had a somewhat positive attitude. This is illustrated in graph 4.1.2. By and large this indicates very positive attitudes in both groups towards attending CTYI. The questionnaire data was inputted into the computer package SPSS. Performing some statistical analysis on this question using a Wilcoxon ranking test (for ordinal data) indicates that the parents significantly rank ($p \leq \cdot 01$) the child's attitude towards attending CTYI as more positive than the child does themselves. In the next section we will see that the secondary school data shows similar results. I believe that this is because the parents are comparing their child's attitude to attending CTYI with the child's attitude to attending school. The parents seem to believe that their child is more enthusiastic towards attending CTYI and therefore has a more positive attitude. The parents and students reasons for attending CTYI is listed in Table 4.1.1

Table 4.1.1: Parents and Child's Reasons for Child Attending CTYI

	Parent	Child
To learn New Things	97%	96%
Subject Interested Them	96%	97%
Enjoyed Previous Experience	96%	93%
Make New Friends	45%	58%
Improve Study Techniques	26%	43%
Renew Old Acquaintances	12%	27%

From this table we can see that the most popular reason for attending was to learn new things. We would expect this to be true as the opportunity to study and learn new things would be an important factor for any high ability child. There was also a high percentage who said they attended because the subject interested them. This is worth noting as I believe that many high ability children are not challenged at school because they find the subject matter unappealing. A higher proportion would be interested if more exciting subject choices were available to them. Students in this study participated in CTYI courses like Forensic Science, Engineering, Computer Programming, Creative Writing, Psychology, Novel Writing, Zoology and Marine Biology. All of these subjects are usually only offered at university and are not on the school curriculum. This makes them more appealing to high ability students and acts as an incentive to attend CTYI.

Some 58% of students compared to 45% of parents said they attended to make new friends. This shows that the social aspect of attending CTYI is more important to the students than the parents. The parents in this case may believe that the programme has larger academic benefits and would not see the social benefit as much as the child. Finally 43% of students compared to 26% of adults said they attended to improve their study techniques. This is an interesting statistic and is consistent with the data in the ranking of ability theme in a later section where we will see that parents significantly rank their children higher in academic subjects than the children themselves. The parents may feel that the child does not need to improve their study techniques while the child sees this differently. Finally 99% of parents and 98% of the students said they had benefitted from attending CTYI.

Graph 4.1.1: Parents Perceptions of Child's Attitude towards attending CTYI
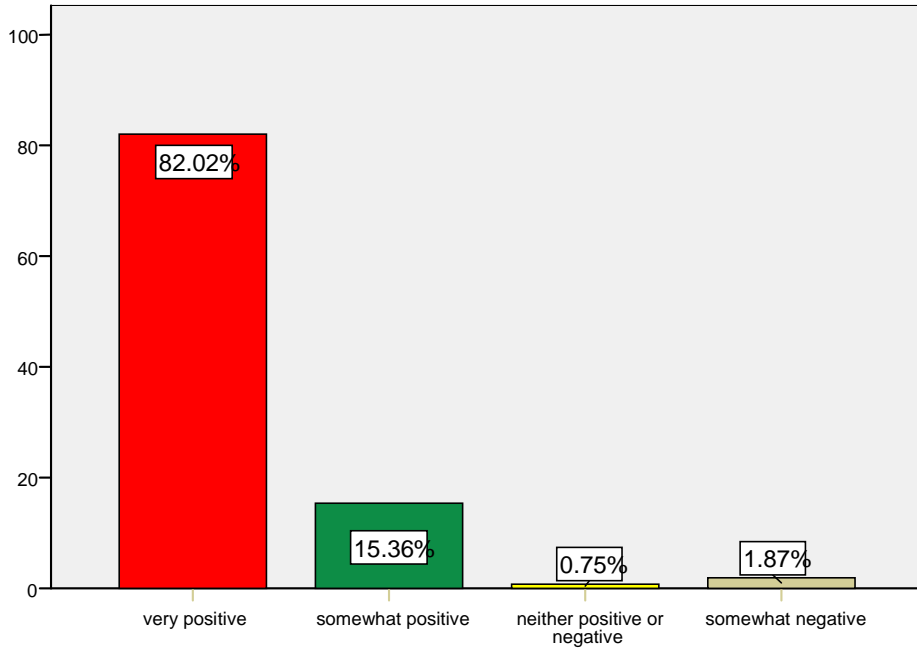
Graph 4.1.2: Child's Attitude towards attending CTYI classes
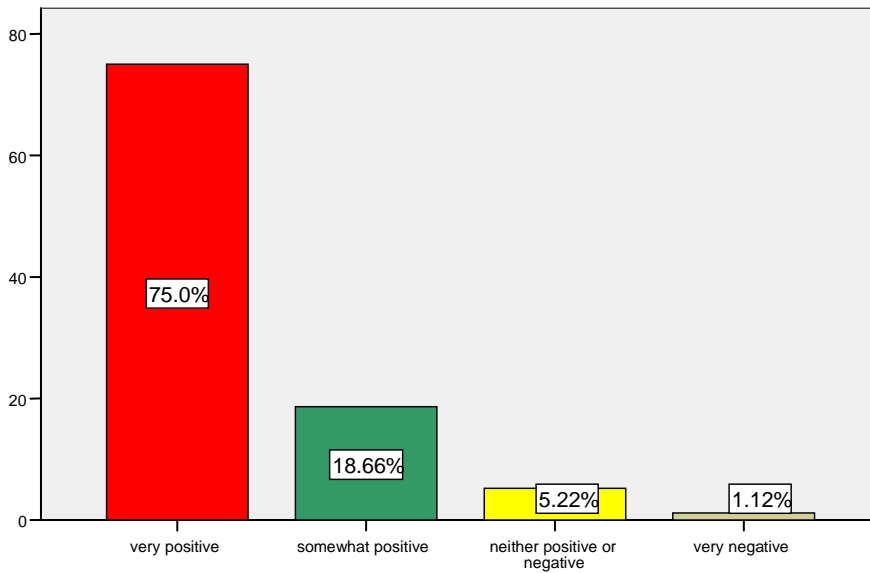
Graph 4.1.3: Parents Academic Satisfaction with CTYI Classes
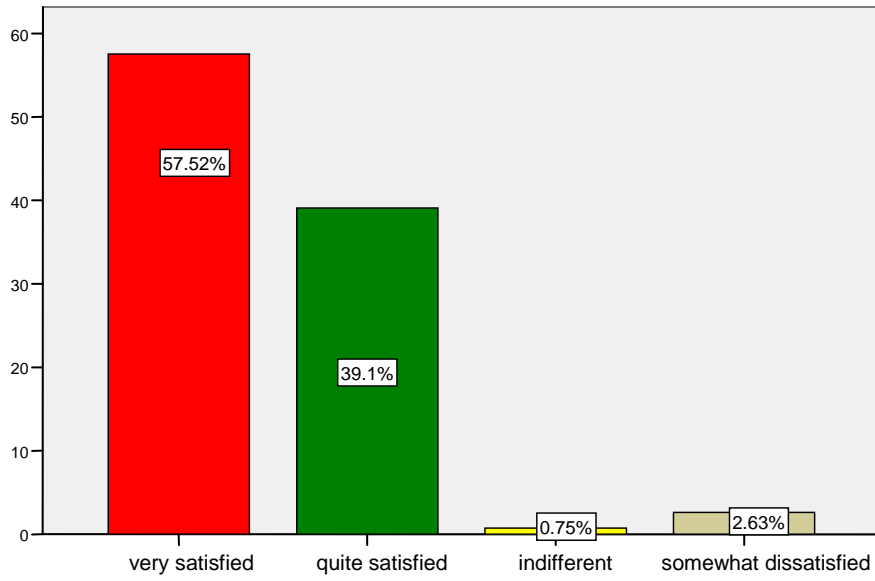
Graph 4.1.4: Child's Academic Satisfaction with CTYI classes
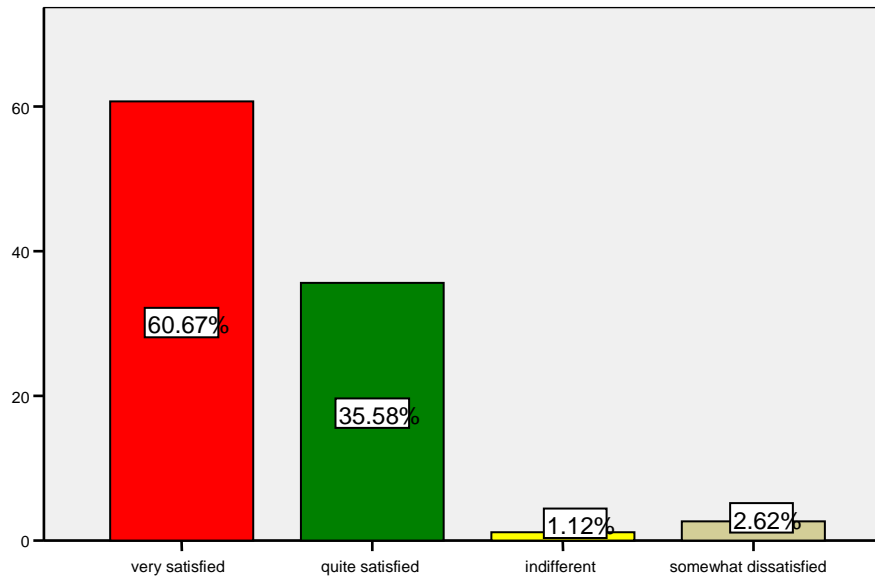
Theme 2: Level of Academic Satisfaction and Challenge at CTYI

Some 57.2% of parents said they were very satisfied academically with the classes their child took at CTYI. A further 39.1% said they were quite satisfied. This is illustrated in graph 4.1.3. From the students responses some 61% said they were very satisfied with the classes at CTYI and a further 36% said they were quite satisfied. This is represented in graph 4.1.4. Generally both parents and students seem academically satisfied with classes at CTYI. Less than 3% of both groups were somewhat dissatisfied academically with the CTYI classes. Running a statistical test on the level of academic satisfaction at CTYI shows no significant differences in parent and student responses.

Theme 3: Attitude and Academic Challenge at School

Only 24.5% of parents said their child was very satisfied academically at school with a further 41% saying that they were quite satisfied. Just under 20% of parents said their child was somewhat dissatisfied at school with 5% saying they were very dissatisfied. This is represented in graph 4.1.5. Some 31% of primary school students who had attended CTYI said they were very satisfied at school with 37% saying they were quite satisfied. 16% of the students said they were dissatisfied at school with 3.6% saying they were very dissatisfied. If we statistically compare the level of academic satisfaction between CTYI and school using a Wilcoxon ranking test, we find that both parents and students report that they have a statistically higher level ($p \leq \cdot 001$) of academic satisfaction at CTYI compared with school. This is an important finding as it proves that the students are academically happier at CTYI compared to school and that there is a higher level of gifted children unhappy at

school than on out of school programmes. It shows that in this case an out of school programme is a better way of educating high ability children than school in terms of academic satisfaction.

Some 49% of parents said their child had a very positive attitude towards attending school with a further 26% saying their child had a somewhat positive attitude towards school. This is represented in graph 4.1.7. This compares to 38% of students who had a very positive attitude towards attending school and 31% who had a somewhat positive attitude. This result is represented in graph 4.1.8. By statistically comparing these two results we see that parents significantly ($p \leq \cdot001$) perceive their child's attitude to attending school as better than the child themselves. I believe there may be two reasons for this. Firstly the parent may perceive that the child is happier than they actually are at school and does not see or at least underestimates the level of frustration that the child may experience. Alternatively the child may be communicating an unduly negative attitude towards attending school. This was an interesting finding and was one that I was interested in exploring in more detail in the in depth interviews later in the study.

By statistically comparing the attitudes between attending CTYI and school using the Wilcoxon ranking test we find that both parents and students report a significantly better attitude ($p \leq \cdot001$) towards attending CTYI than school. This is another important finding as it proves that both parents and students have a more positive attitude in attending out of school programmes than regular school. As we have shown earlier the chance to study new and interesting subjects and to meet students of similar ability is an appealing draw towards attending the CTYI classes.

Graph 4.1.5: Parents Academic Satisfaction with School
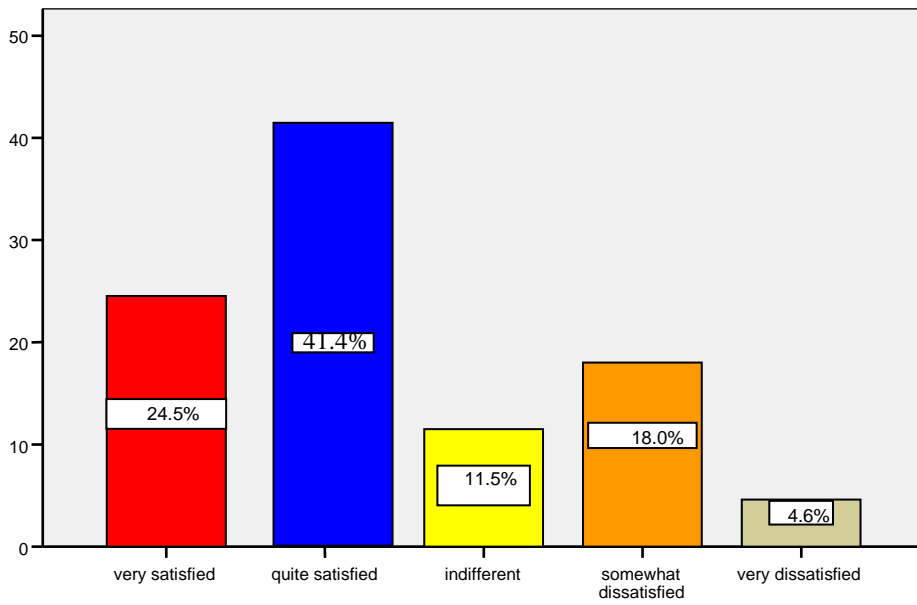
Graph 4.1.6: Child's Academic Satisfaction with School
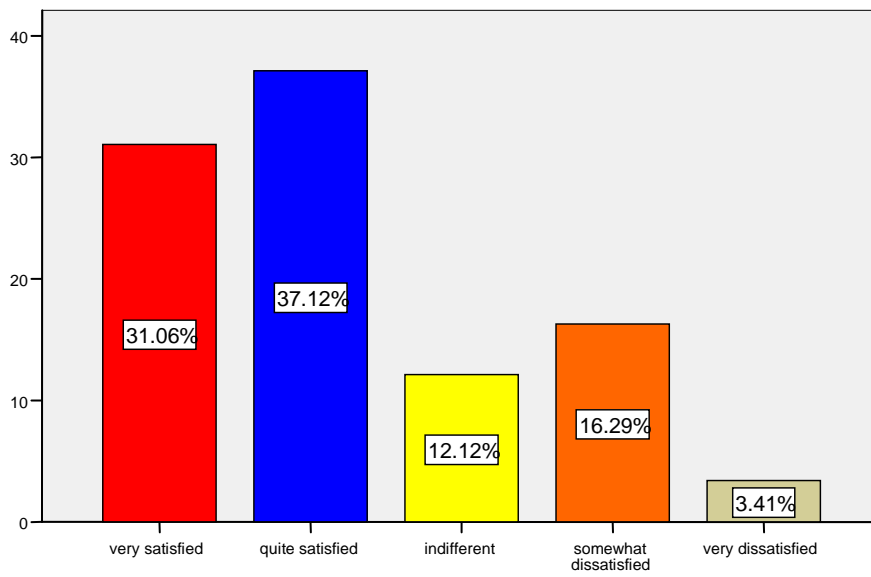
Graph 4.1.7 Parents perception of Child's Attitude to School
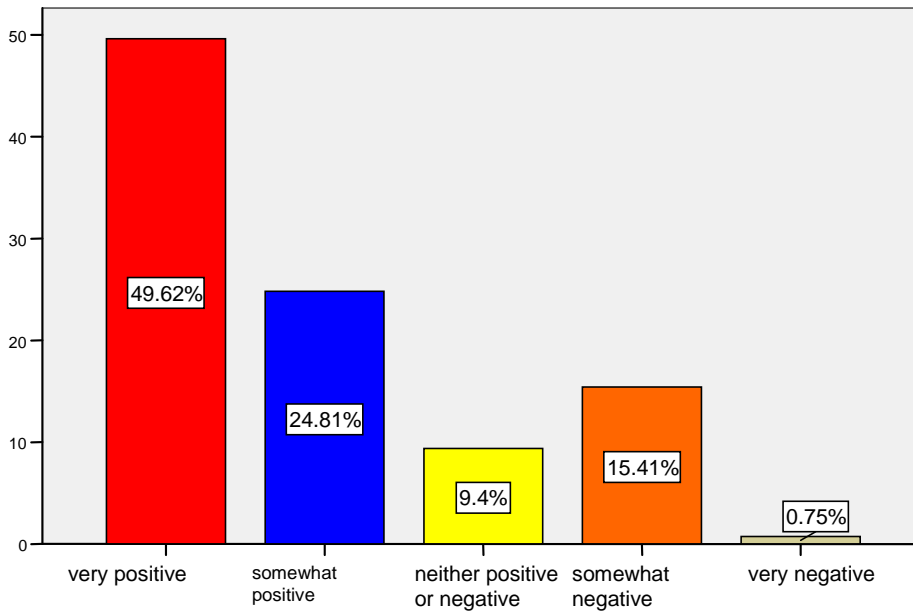
Graph 4.1.8: Child's Attitude to Attending School
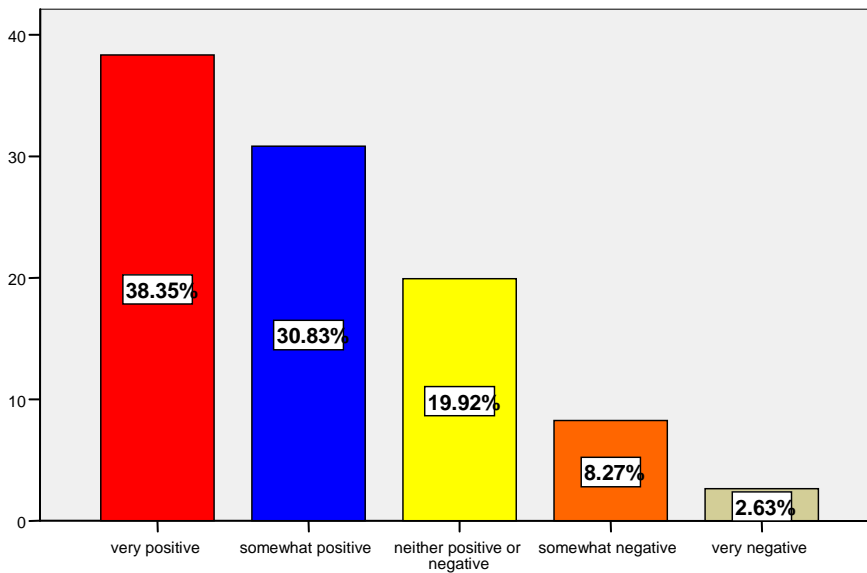
Theme 4: Ranking and Ability at School in relation to Peers.

Table 4.1.2 shows how parents rank their child's ability in various subjects relative to their peers in school. Table 4.1.3 shows how the child ranks their own ability relative to their peers at school.

Table 4.1.2: Parents Ranking of Child's Ability in School Subjects Relative to their Peers.

	Much Better	Somewhat better	About equal	Somewhat worse	Much worse
Irish	25%	34%	33%	5%	3%
English	71%	24%	5%	1%	0%
Maths	65%	26%	8%	1%	0%
Science	67%	25%	8%	0%	0%
History	54%	32%	15%	1%	0%
Geography	41%	40%	17%	1%	0%
Physical Education	8%	14%	49%	24%	4%

Table 4.1.3: Students Ranking of Ability in School Subjects Relative to their Peers

	Much Better	Somewhat better	About equal	Somewhat worse	Much worse
Irish	18%	37%	37%	5%	3%
English	54%	31%	14%	1%	0%
Maths	57%	28%	12%	3%	0%
Science	50%	30%	20%	0%	0%
History	41%	32%	26%	1%	0%
Geography	34%	32%	29%	6%	0%
Physical Education	17%	22%	46%	12%	3%

These tables illustrate some important data. From table 4.1.2 we can see that parents significantly rank their children's ability as much better than their peers in English (71%), Science (67%) and Maths (65%). Only 8% of parents rank their children as better in Physical Education while 28% rank them as worse than their peers in this area. This compares to 3% who rank their children as worse at Maths, 1% who rank them as worse at English and no parents actually think their child is worse than their peers at Science. This shows that the parents have a high perception of their child's ability relative to their peers in academic subjects. However this does not carry over towards non academic subjects like Physical Education. This could be explained by the fact that CTYI has an academic assessment for admittance and this has heightened the parent's belief that the child is significantly better academically than their peers in all subjects.

Table 4.1.3 shows how the students rank their ability in various subjects relative to their peers in school. The students too rank themselves as much better than their peers in English (54%), Maths (57%) and Science (50%). Some 17% of students rank themselves as much better than their peers at Physical Education compared to 8% of parents. This shows that the students do perceive themselves to be better at Physical Education than the parents. However it is worth noting that overall only 39% of students perceive themselves to be much better or somewhat better than their peers in Physical Education compared to Maths (85%), English (85%) and Science (80%). This proves that the children as well as the parents also have a more academic slant when it comes to ranking their ability. The two tables show some interesting figures for Irish compared to the other academic subjects. Only 25% of parents and 18% of students rank themselves as much better than peers in Irish. Some 33% of parents and

37% of students rank themselves as about equal to their peers in Irish. This could be explained by the fact that the assessment that they took to gain entry into CTYI was in English and that they do not believe they have linguistic talents. Some students may also be at all Irish schools where everyone speaks Irish fluently so the high ability students may not feel significantly better at Irish.

Statistically comparing the two sets of rankings between students and parents using the Wilcoxon Ranking test is given below.

Table 4.1.4: Comparison of Students and Parents Subject Ranking Compared to Peers.

	Wilcoxon (p) value	Higher Rank
Irish	0.26	n/s
English	0.00	parents
Maths	0.01	parents
Science	0.00	parents
History	0.00	Parents
Geography	0.00	Parents
Physical Education	0.00	Children

There is significance in all the academic subjects except Irish that the parents rank their children as significantly better in relation to their peers than the children rank themselves. In Physical Education though the children rank themselves as significantly better than the parents do. We have discussed previously that the parents seem to have a more academic perception in relation to ranking of ability than the children. These results lead us to another question. Is this a case that the parents are overestimating their child's ability or are the children in some cases underestimating their ability? This was an issue that I was anxious to further explore in the parent and student interviews that are documented in a later section.

Theme 5: Comfort with Ability and Comfort with term Gifted

The parents comfort with their child's ability is documented in Graph 4.1.9. Just under 70% of parents are very comfortable with their child's ability with a further 26% quite comfortable with this ability. The child's comfort with their own ability is documented in graph 4.1.10. 65% of the students are very comfortable with their ability with 23% quite comfortable. Overall these figures show that at primary school high ability children are mostly comfortable with their ability and that their parents are to a large extent comfortable with their child's ability. Statistical analysis shows ($p \leq \cdot 03$) that parents are more comfortable with the child's ability than the child themselves. This lower score for the children themselves could be because the students have a level of anxiety about their ability relative to their peers at school. We have seen that the students significantly rank themselves lower in academic subjects than the parents rank them. In terms of encouragement some 56% of the students feel that they get little or no support from their classmates. This may be a factor as to why they have a lower level of comfort with their ability than their parents. They might feel that they have a need to hide their ability because of the lack of encouragement from classmates.

Table 4.1.5 shows how the parents perceive the level of encouragement in relation to their child's ability and table 4.1.6 shows the child's own perception of where they receive the most encouragement. The parents perceive that the strongest support for the child in relation to ability here naturally comes from the parents themselves with 93% indicating strong support. Over 50% of the parents believe that their child receives little or no support from their friends in relation to their ability and 61%

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indicate that they believe their child receives little or no support from their classmates. These figures are high and are worthy of further investigation. While the classmates figure is endorsed by the students where 56% perceive little or no support, 60% of the students believe they receive either strong or some support from their friends. These themes will be further investigated in the student and parent interviews and analysed collectively in the next chapter A quarter of the parents surveyed believe that their child receives little or no support from their teachers at school. This figure ties in with the belief that the parents are statistically (p<·001) less satisfied with the level of academic challenge that the child receives at school compared to the child themselves.

Table 4.1.5: Parents Perception of Support for High Ability Child.

	Strong support	Some support	Little support	No support
Parents	93.3%	6%	0.5%	0.5%
Teachers	31%	44%	20%	5%
Siblings	30%	34%	25%	9%
Friends	12%	37%	29%	22%
Classmates	7%	33%	32%	29%

Table 4.1.6: Students Perception of Level of Encouragement Received.

	Strong support	Some support	Little support	No support
Parents	89%	8%	2.5%	0.5%
Teachers	41%	37%	13%	9%
Siblings	26%	37%	18%	18%
Friends	25%	35%	20%	20%
Classmates	14%	29%	25%	31%

Only 17% of parents are very comfortable with using the term gifted to describe their child's academic ability with 28% quite comfortable. Some 32% are uncomfortable with the term gifted to describe their child's ability with 5% very uncomfortable. This is illustrated in graph 4.1.11 below. Some 38% of students describe themselves as very comfortable with the term gifted to describe their academic ability with 29% comfortable with this term. Comparing these figures show that the students are more comfortable with the term gifted to describe their ability. Statistically this is true as well as the students are significantly (p<·001) more comfortable with the term gifted to describe their academic ability than the parents. Perhaps as you get older the term gifted may have more of a negative stereotype so the parents are more uncomfortable with the term. This will be further investigated by comparing these results with those of the secondary school students in the next section and was another theme that I developed in the parent and student interviews.

Summary of Primary School Questionnaire

The data here has shown that both students and parents have a significantly more positive attitude towards attending CTYI to school. It has also shown that both students and parents have a significantly higher level of academic satisfaction with classes at CTYI compared to school. Parents significantly rank their children better than their peers in all academic subjects compared to the students themselves. While both parents and students seem comfortable with their academic ability, there is a higher level of discomfort with the term gifted to describe that ability in parents compared to students

Graph 4.1.9: Parents Comfort with Child's Intellectual Ability
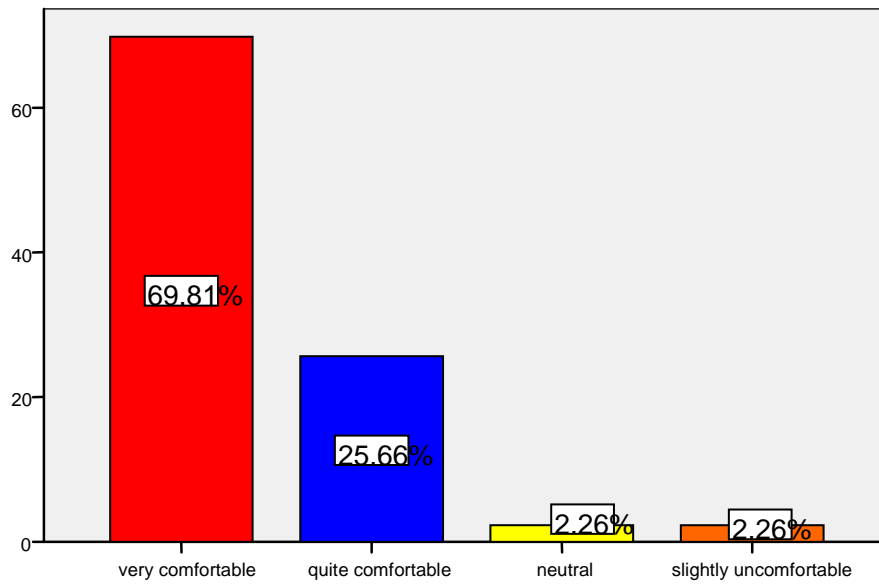
Graph 4.1.10: Child's Comfort with Intellectual Ability
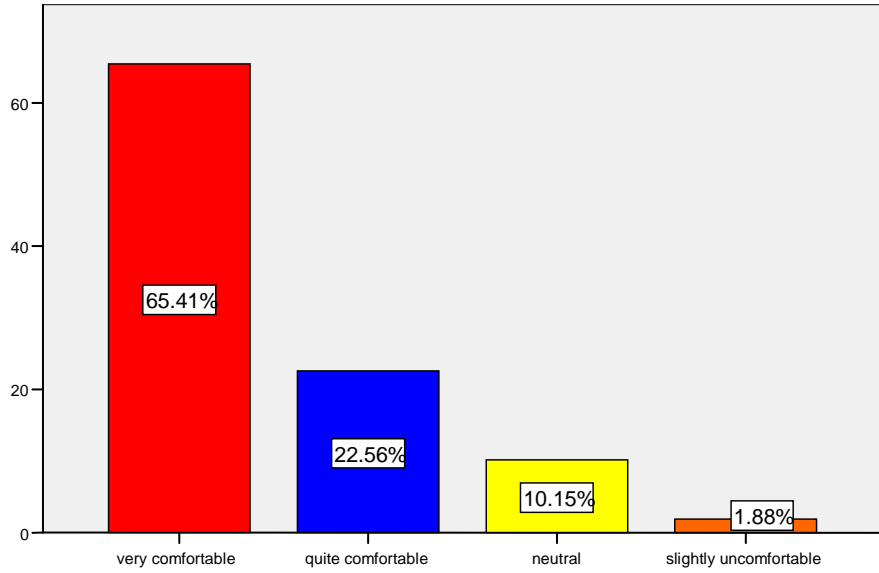
Graph 4.1.11: Parent's Comfort with the Term Gifted To Describe Child's Ability
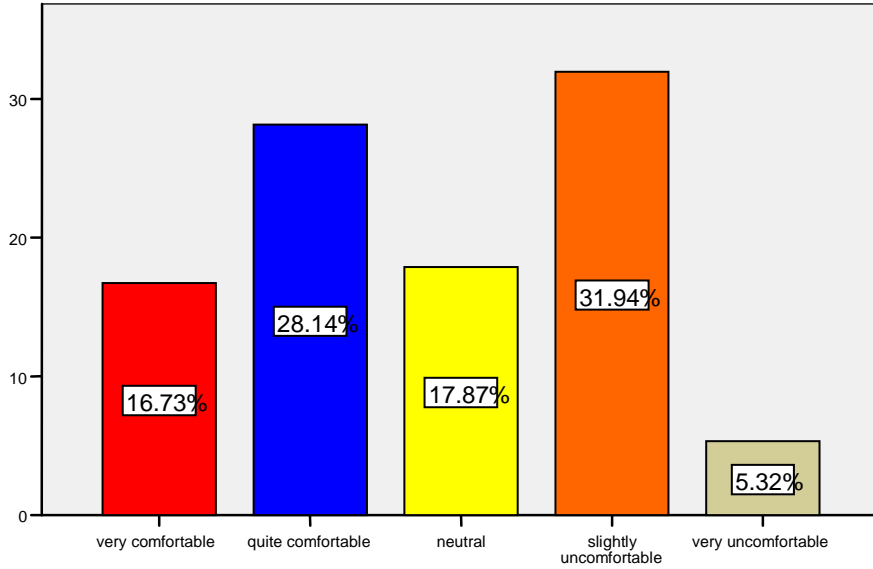
Graph 4.1.12: Child's Comfort with term Gifted to Describe Academic Ability
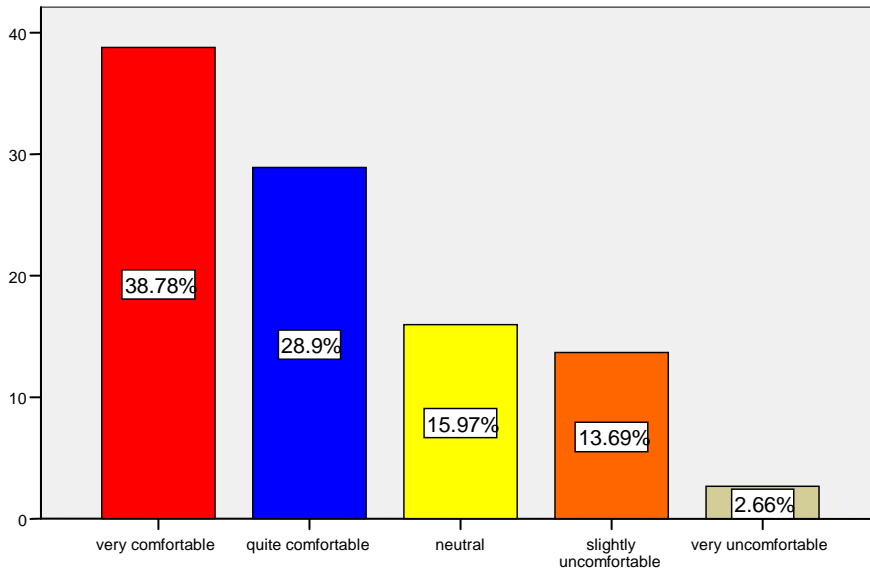
Section 4.2: Secondary School Results

Secondary School questionnaire

This section will analyse the responses from the two sets of questionnaires that were posted out to parents and students who participated in the CTYI Summer classes for secondary school children. While some of the results are similar to the primary school questionnaire, I have included them as a separate section for two reasons. Firstly their similarities show that some of the issues raised in the previous section for primary school students are evident again in secondary school students. From my own experience of working with gifted students some parents often believe that the problems at primary school such as lack of challenge for the high ability child, boredom in school and unstimulating course material do not occur at secondary school. This data proves that the same problems do reoccur. The second reason for their inclusion is that there are some significant differences between the groups particularly around the area of comfort with the term gifted to describe ability. We have seen in the previous section that 67% of primary school students are comfortable with the term gifted to describe their ability. The figure for secondary school students is only 33%. This will be discussed later in this section.

Theme 1: Attitude towards attending CTYI and Why they Attend.

Some 95% of secondary school parents said their child has a very positive attitude to attending CTYI classes with a further 4% saying they were somewhat positive. This data is illustrated in graph 4.2.1. This compares to 71% of secondary school students who said they had a very positive attitude towards attending CTYI and 25% who said they had a somewhat positive attitude. The students attitude towards attending CTYI

is illustrated in graph 4.2.2. Overall then nearly all parents and students perceive a positive attitude towards attending CTYI. Running some statistical test on this data (p≤·001) shows that parents believe that their children have a more positive attitude to attending than the children themselves. As I said previously this finding replicates that of the primary school questionnaire where there was also a statistical significance that the parents felt the attitude was more positive than the children themselves. I think the reason for this in that the parents are comparing the child's attitude to attending CTYI to that of their attitude to attending school. This is another area that I wished to further explore in the follow up interviews in the last section of this chapter.

Parents and students were asked what they thought where their reasons for attending the CTYI programme. Table 4.2.1 indicates some of the most popular answers.

Table 4.2.1: Parents and Students Reasons for Child Attending CTYI

	Parent	Child
To learn New Things	97%	92%
Subject Interested Them	90%	95%
Enjoyed Previous Experience	96%	95%
Make New Friends	81%	93%
Renew Old Acquaintances	68%	78%
Improve Study Techniques	26%	37%

From table 4.2.1 we can observe that the three most popular reasons for attending from both parents and students were to learn new things, subject interested them and because they enjoyed a previous experience. These results were the same as the primary school questionnaire. There are differences as well. Some 93% of secondary school students said they attended to make new friends compared to only 58% of primary school students. Similarly 81% of secondary school parents said their child

attended to make new friends compared to 45% of primary school parents. There is definitely an implication that the social side of the programme is more beneficial at secondary school. This is reinforced by the fact that 78% of the secondary school students said they attended to renew old acquaintances compared to 27% of primary school students.

In total 99% of the secondary school students said they benefitted from attending CTYI which was similar to the primary school group but of the secondary group only 7% said that this benefit was purely academic compared to 29% of the primary group. This can be explained by the programme structure at CTYI. At primary school it's a day course with an academic focus. Social interaction occurs when meeting other people interested in the same things in an academic setting. On the secondary school programme the programme is residential and the course has an academic and social perspective. Naturally then the social impact is greater at an age when it becomes more important to the students themselves.

The secondary students all attended a summer programme and these findings are consistent with previous studies. Enerson (1993) found that summer programmes may help to meet gifted students academic, social and psychological needs while Feldhusen (1991) and Kolloff and Moore (1989) stress the importance for bright children to meet other like minded people as one of the main benefits of these programmes.

Graph 4.2.1 :Parents Perception of Child's Attitude to Attending CTYI
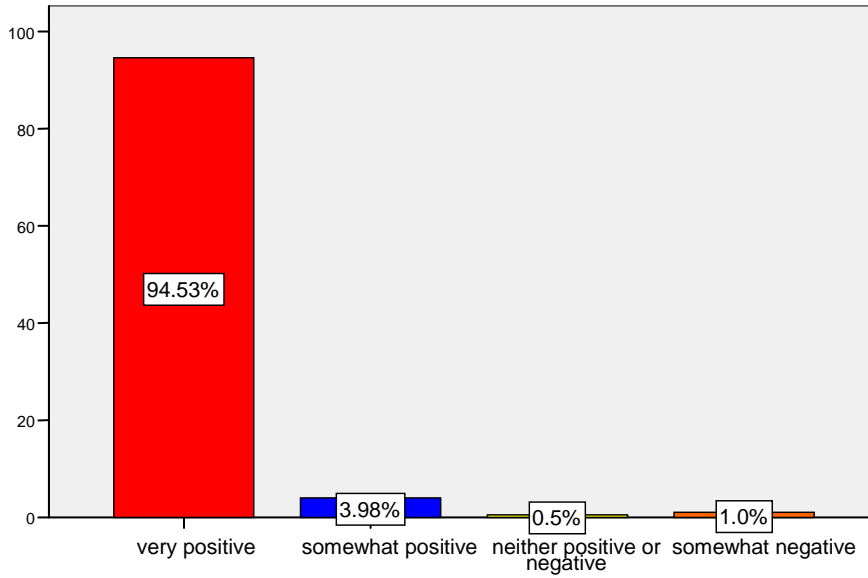
Graph 4.2.2: Child's Attitude to Attending CTYI classes
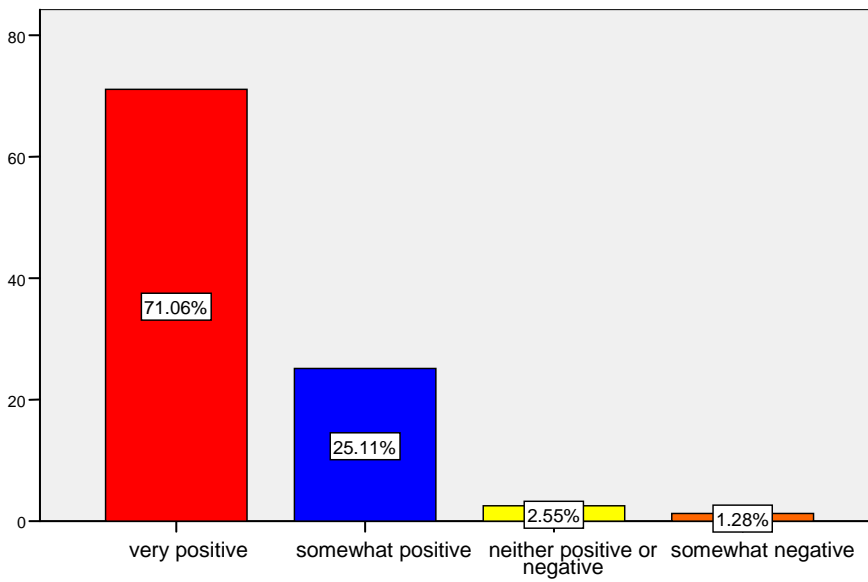
Theme 2: Level of Academic Satisfaction and Challenge at CTYI

Some 82% of parents said they were satisfied academically with the classes their child attended at CTYI with 17% saying they were somewhat satisfied. This is illustrated in graph 4.2.3. In comparison only 63% of students said they were very satisfied with classes at CTYI and 32% said they were somewhat satisfied. This illustrated in graph 4.2.4. Overall the students and parents at secondary seem satisfied academically with the classes at CTYI. Running a statistical comparison parents are significantly ($p \leq \cdot001$) more satisfied academically than the students with the classes at CTYI. This is different to the primary group where they were no significant differences between the student and parent responses to this question. The parent in this instance may be comparing the level of academic challenge to that of school and perceives the child to have a higher level of academic satisfaction. This is something that will be examined in the interviews in the last section of this chapter. Comparing the primary and secondary school students shows that there is no significant difference in academic satisfaction at CTYI between primary and secondary school students.

Graph 4.2.3: Parents Level of academic Satisfaction with CTYI
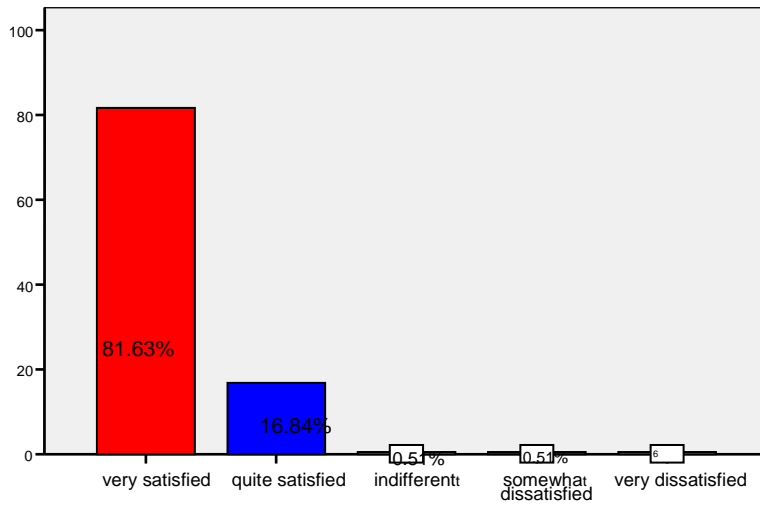
Graph 4.2.4 Child's Academic Satisfaction with CTYI
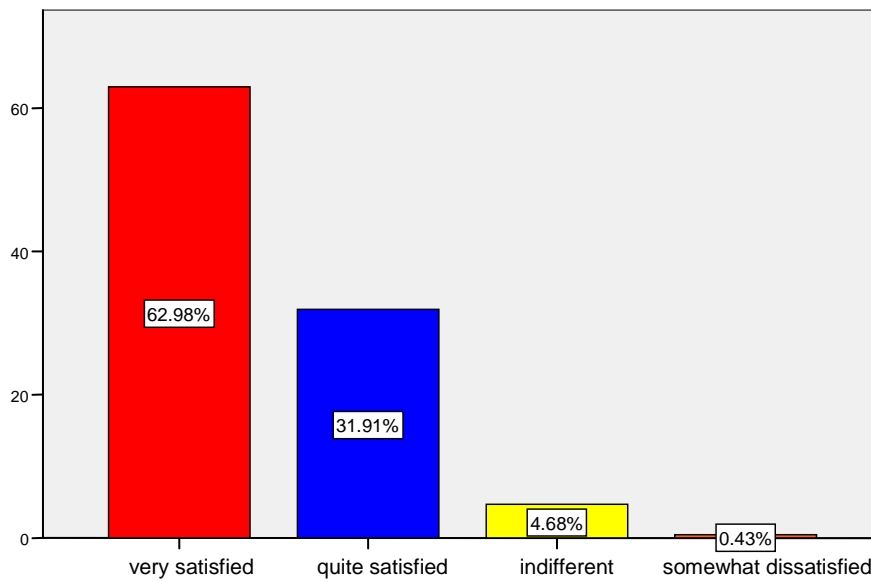
Theme 3: Attitude and Academic Challenge at School

The parents level of academic satisfaction with the child's school is illustrated in graph 4.2.5 and the child's level of academic satisfaction with school is illustrated in graph 4.2.6. Only 23% of parents said that their child was very satisfied at school with 49% saying they were somewhat satisfied. In comparison 17% of students said they were very satisfied with the level of academic challenge in school with a further 44% saying they were somewhat satisfied. Running a statistical comparison between these two groups on this question yielded no significant differences. However if we compare the level of academic satisfaction between CTYI and school both parents and students are statistically ($p \leq \cdot 001$) more satisfied with CTYI over school. These results are the same as the primary school group.

Just under 20% of both parents and students at secondary school indicated that they were dissatisfied academically with the level of academic challenge at school. Comparing the primary and secondary group the primary school students are significantly ($p \leq \cdot 05$) more satisfied academically at school than the secondary school students. I think that this is because bright students become more disillusioned with school as they get older. Many of the secondary school students are gifted in subject specific areas and don't feel that they get enough challenge in that subject at school.

Some 51% of parents said their child had a very positive attitude towards attending school with a further 31% saying their child had a somewhat positive attitude towards school. This is represented in graph 4.2.7. This compares to 33% of students who had a very positive attitude towards attending school and 36% who had a somewhat positive attitude. This result is represented in graph 4.2.8. By statistically comparing

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these two results we see that parents significantly (p≤·001) perceive their child's attitude to attending school as better than the child themselves. This finding is consistent with that of the primary school data and was discussed in the last section.

By statistically comparing the attitudes between attending CTYI and school using the Wilcoxon ranking test we find that both parents and students report a significantly better attitude (p≤·001) towards attending CTYI than school. This is again consistent with the finding from the primary school group and it proves that both parents and students have a more positive attitude in attending out of school programmes than regular school. We have noted previously that for secondary students the social factors like making new friends and renewing old acquaintances on these programmes may be a significant factor for this as well as the chance to study new and interesting academic material.

The literature too shows that many high ability children are not sufficiently challenged at school. Feldhusen (1997) states that gifted students often do not have a variety of educational opportunities available to them in their schools and other special programmes are necessary for these students to fulfil their potential.

Graph 4.2.5: Parents Academic Satisfaction with School
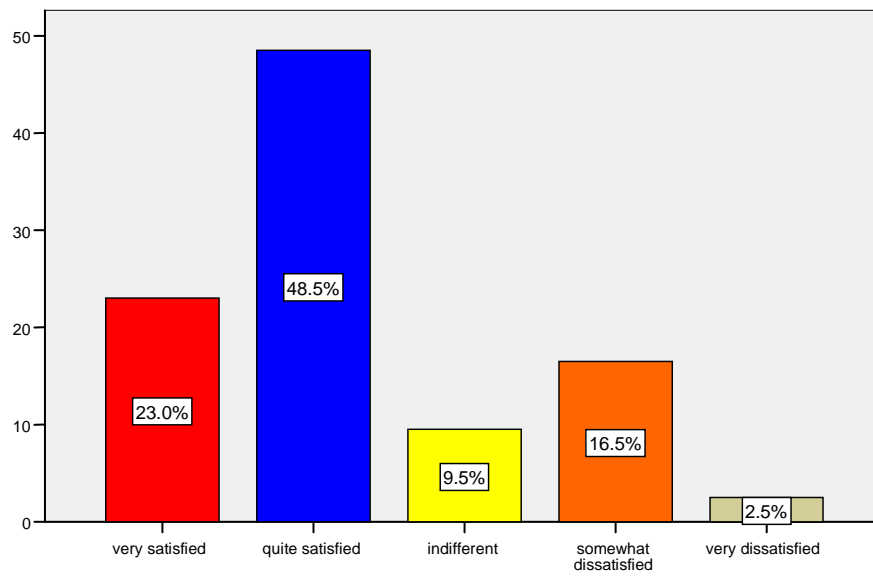
Graph 4.2.6: Child's Academic satisfaction with School
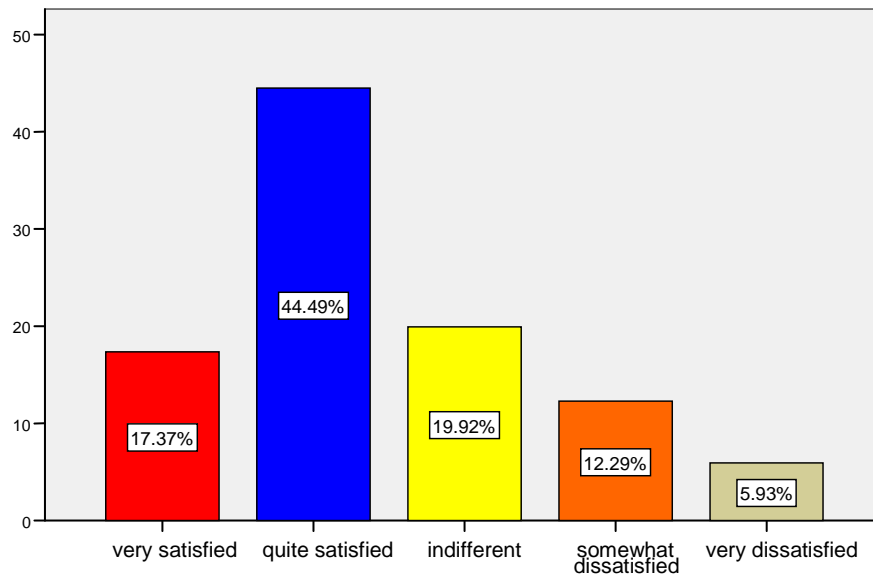
Graph 4.2.7: Parents Perception of Child's Attitude to School
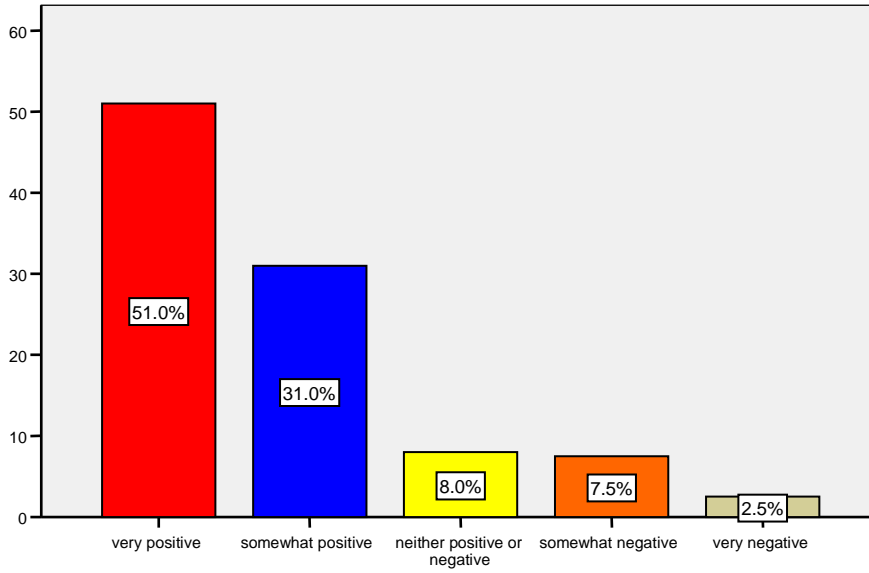
Graph 4.2.8: Child's Attitude towards Attending School
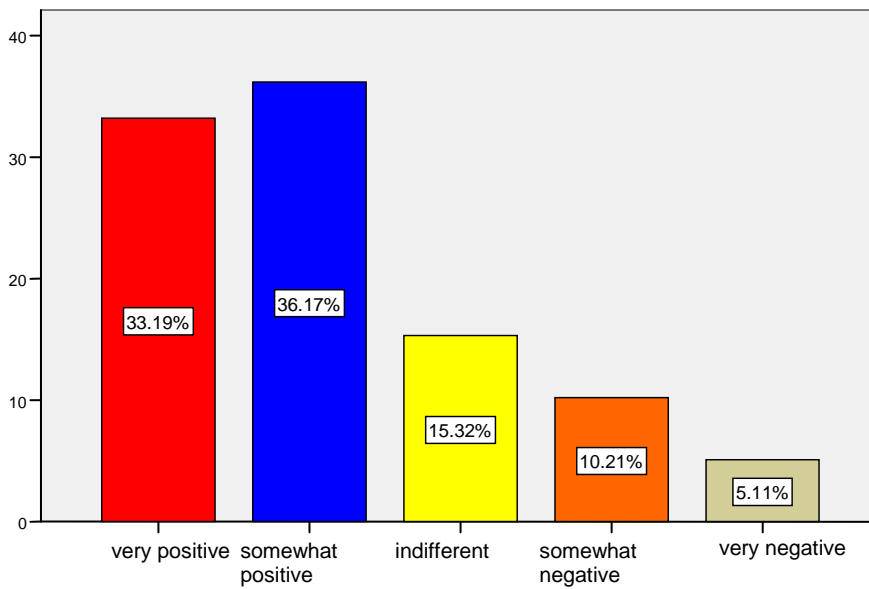
Theme 4: Ranking and Ability at School in relation to Peers.

Table 4.2.2 shows how parents rank their child's ability in various subjects relative to their peers in secondary school and Table 4.2.3 shows the students responses to the same question.

Table 4.2.2: Parents Ranking of Child's Ability in Various subjects.

	Much Better	Somewhat better	About equal	Somewhat worse	Much worse
Irish	28%	30%	29%	8%	5%
English	62%	31%	5%	2%	0%
Maths	53%	29%	13%	4%	1%
Science	57%	32%	11%	0%	0%
Languages	44%	31%	19%	4%	2%
Business	49%	27%	22%	1%	1%
History	60%	32%	8%	0%	0%
Geography	49%	32%	18%	1%	0%
Physical Education	10%	17%	47%	17%	9%

Table 4.2.3: Students Ranking of Ability in School Subjects Relative to their Peers

	Much Better	Somewhat better	About equal	Somewhat worse	Much worse
Irish	24%	31%	26%	11%	8%
English	50%	38%	11%	1%	0%
Maths	42%	34%	15%	6%	3%
Science	43%	39%	15%	2%	1%
Languages	48%	34%	14%	3%	1%
Business	35%	40%	19%	5%	1%
History	39%	35%	18%	51%	3%
Geography	39%	342%	19%	5%	3%
Physical Education	16%	24%	38%	17%	5%

From table 4.2.2 we can see that parents significantly rank their children's ability as much better than their peers in English (62%), History (60%), Science (57%) and Maths (53%). This is consistent with the primary school data. Again a much lower proportion (10%) of parents rank their children as better in Physical Education while 26% rank them as worse than their peers in this area. This continues the primary school trend that parents significantly rank their children better in academic areas. The secondary student data is included in Table 4.2.3. Again the students significantly higher rank themselves as much better in English (50%), Languages (48%) and Science (43%). Irish scores a much lower academic ranking for both parents (28%) and students (24%) than other academic subjects and again this is consistent with the primary school data.

Table 4.2.4: Comparison of secondary school Students and Parents Subject Ranking Compared to Peers.

	Wilcoxon (p) value	Higher Rank
Irish	0.207	n/s
English	0.036	parents
Maths	0.031	parents
Science	0.005	parents
Languages	0.025	children
Business	0.676	n/s
History	0.000	parents
Geography	0.088	n/s
Physical Education	0.028	children

This data is different to the primary school data in that there is no significant differences in how parents and children rank themselves relative to their peers in Irish, Business and Geography. However the parents again rank their children higher in English, Maths, Science and History. The children rank themselves higher again in Physical Education and higher in Languages. Similarly to the primary school study

only 39.1% of students rank themselves as much better or somewhat better at Physical Education relative to their peers compared to 82.3% who rank themselves as somewhat better or much better at Languages and Science (82.5%) and English (87.4%) respectively. This ties in to the notion that the students seem to make a distinction between academic giftedness and giftedness in other domains. As they have been identified through an academic assessment the students perceive themselves to be better academically in subjects that they consider themselves to be good at but not in other subjects.

Theme 5: Comfort with Ability and Comfort with term Gifted

Some 82% of parents describe themselves as very comfortable with their child's intellectual ability with 14% describing themselves as quite comfortable. This is illustrated in the graph 4.2.9. The child's level of comfort with ability is illustrated in graph 4.2.10. Some 55% of students said they were very comfortable with their ability and a further 30% described themselves as quite comfortable. Statistically comparing the two groups of secondary parents and students on this question shows that the parents are significantly more comfortable with the child's ability than the child themselves. Again this is a similar finding to the primary school questionnaire. The students seem to have lower comfort with ability because of a perception of what their peers may think of them. The following tables further illustrate this point. Table 4.2.5 shows the parents perception of where students receive encouragement in relation to their ability and table 4.2.6 shows the students own ideas as to where they receive encouragement.

Graph 4.2.9: Parents Comfort with Child's Ability
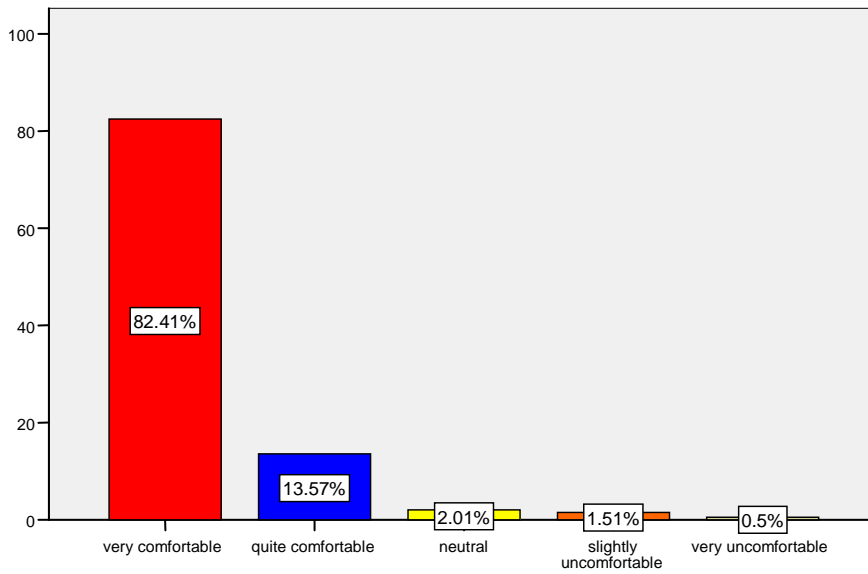
Graph 4.2.10: Child's Comfort with ability

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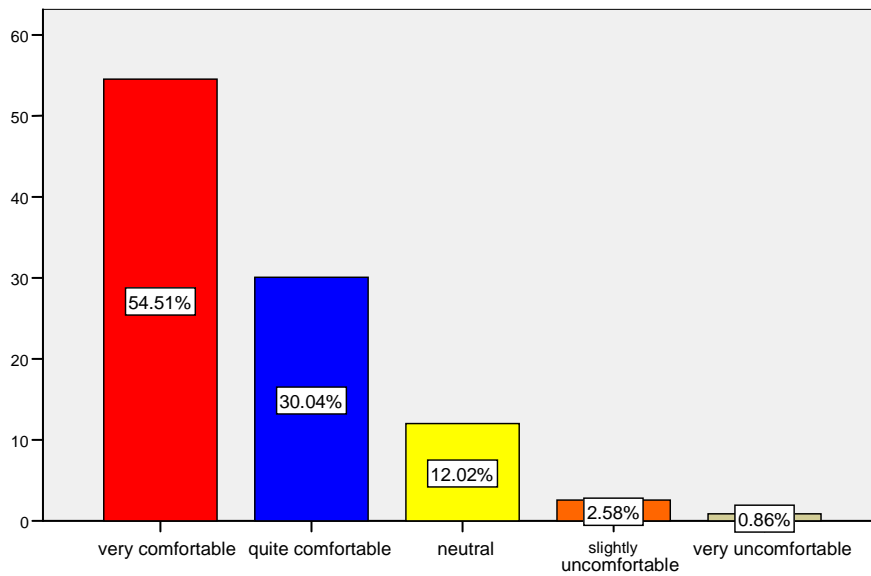
Table 4.2.5: Parents Perception of Support for High Ability Child.

	Strong support	Some support	Little support	No support
Parents	96%	4%	0%	0%
Teachers	32%	53%	11%	4%
Siblings	44%	35%	12%	9%
Friends	20%	44%	26%	10%
Classmates	8%	31%	36%	25%

Table 4.2.6: Level of Encouragement Received by Students in Relation to Ability

	Strong support	Some support	Little support	No support
Parents	83.5%	12%	4%	0.5%
Teachers	33%	44%	16%	7%
Siblings	45%	31%	16%	7%
Friends	33%	48%	12%	7%
Classmates	15%	33%	32%	21%

The strongest support here from both students and parents is received from the parents with 96% of parents and 84% of students indicating strong support. This is consistent with the primary school questionnaire. Over 35% of the parents believe that their child receives little or no support from their friends in relation to their ability and 61% indicate that they believe their child receives little or no support from their classmates. The secondary school students feel that they get greater support from their friends than the parents do with 81% indicating strong or some support. Just over half of the students perceive that they get little or no support from their

classmates. Comparing this with the primary school data shows that the primary school parents perceive a lower level of support from friends in relation to ability than the secondary school students. This could be attributed to the parents perception that the child has more settled friends at secondary who would be more aware of the child's ability. The perception from both groups that there is a lack of support from classmates is still high from both parents and students at secondary and this is also the case at primary. The results from the Piers Harris Children's Self-Concept scale that was administered to secondary school students in this study shows that these students have a lower self concept in certain social areas. This is reported in section 4.4 of this chapter will be discussed further in the analysis section.

Only 20% of parents are very comfortable with using the term gifted to describe their child's academic ability with a further 22% quite comfortable. This is illustrated in graph 4.2.11. Some 42.4% are uncomfortable with the term gifted to describe their child with 7.6% very uncomfortable. Some 19% of the secondary school students are very comfortable with the term gifted to describe their ability with a further 33% quite comfortable. This is illustrated in graph 4.2.12. From this graph we can see that 43.3% described themselves as uncomfortable with the term gifted being used to describe their ability with 14.7% indicating they were very uncomfortable. Comparing the results of the secondary school students with that of the primary school students we see that the primary school students are significantly ($p \leq \cdot 05$) more comfortable with their ability than the secondary school students and also significantly ($p \leq \cdot 001$) more comfortable with the term gifted to describe this ability. One could conclude that as you get older the term gifted takes on a more negative stereotype and is harder to deal with from the perspective of the secondary school student.

Graph 4.2.11: Parent's comfort with term gifted to describe child's ability
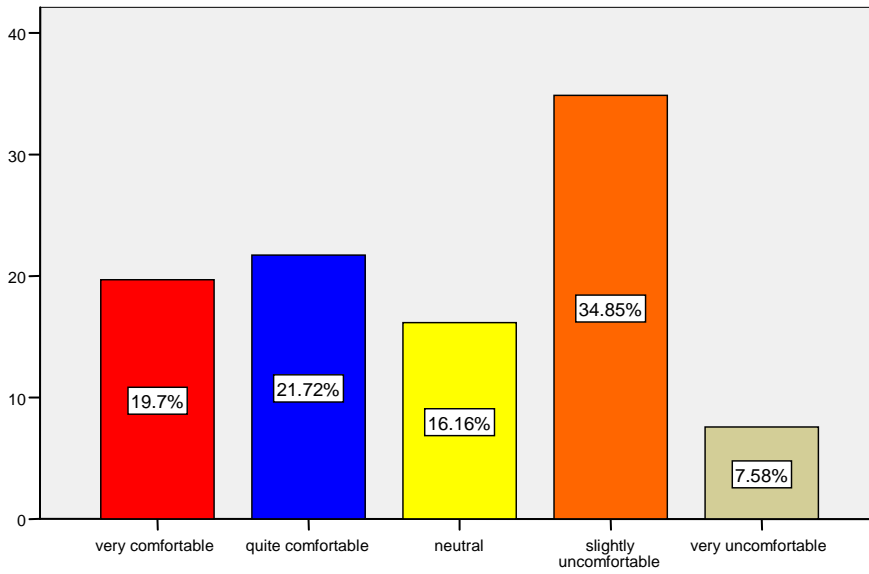
Graph 4.2.12: Child's comfort with term gifted to describe ability
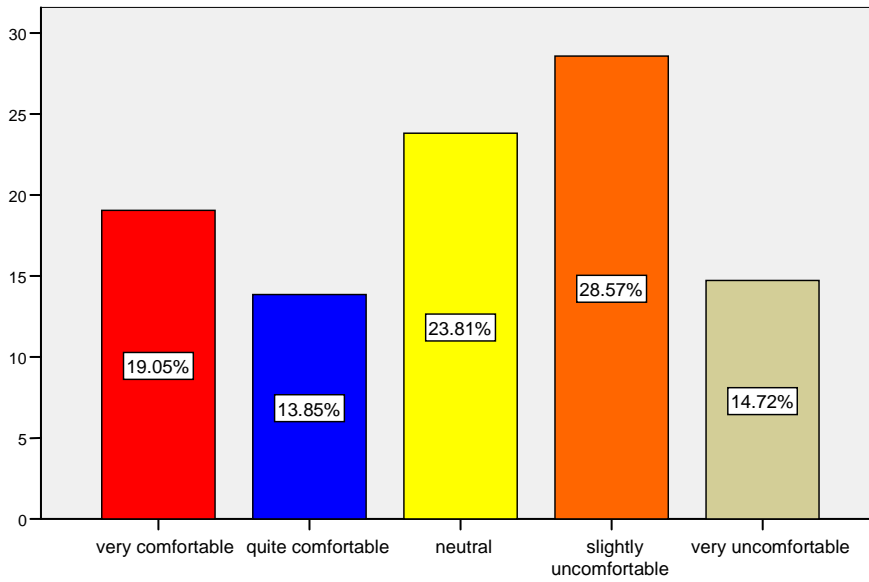
Section 4.3: Myers-Briggs Type Indicator Results

Overview

The Myers-Briggs Type Indicator (MBTI) is a personality measure based on Jung's theory of psychological types. The test consists of a series of forced choice questions representing behavioural preferences and preferred self-descriptive adjectives. The results are then tabulated to indicate preferences for each of the four scales: extroversion-introversion (EI); sensing-intuition (SN); thinking-feeling (TF); and judgement-perception (JP). Although a continuous scale score is provided for each dimension, the final personality profile contains a nominal score of preference. For example, a person who endorses fifteen items scaled for introversion and nine items scaled for extroversion is given a preference of I, and is therefore considered introverted. The individual is described with four letters (e.g. INTJ) that represent the preference for each type. When the test is scored, both the nominal and continuous scores are presented in the report, but in practice only the four letter code is used, because the types are considered to be mutually exclusive classes.

The MBTI Preferences

There are four scales on the MBTI. The first scale, extraversion-introversion shows how we look at the world. Those who prefer extraversion tend to focus on the outer world of people and external events. Extraverts prefer to communicate by talking and learn best through doing and discussing. People who prefer introversion tend to focus on their inner world of ideas and experiences. They prefer to communicate by writing and learn best by reflection. The second scale, sensing-intuition demonstrates how we

take in information. People who prefer sensing focus on the world as they perceive it through their five senses. They take in information through their eyes or ears to find out what is actually happening. Intuitives take in information by concentrating on the relationships and connections between facts. They explore possibilities and meanings by way of insight. The third scale, thinking-feeling focuses on how we make decisions. People who prefer thinking in their decision making tend to look at the logical consequences of a choice or action. When making a decision they tend to focus on objective standards. People who use feeling in decision making tend to consider what is important to them and to other people. They rely on an understanding of personal values, making decisions more subjectively. The fourth scale, judgment-perception concerns our attitudes to the outer world. People who prefer to use judging in their outer world tend to live in a planned, orderly way preferring to regulate and control life. They like a sense of closure in their decision making. People who use perceiving in their outer world tend to seek experience and understanding rather than control of life. They tend to keep an open, curious mind before making a decision. They don't like planning or making early decisions, preferring to weigh up all the possibilities before deciding on an outcome.

CTYI Myers Briggs Results

The following three charts, 4.3.1, 4.3.2, and 4.3.3 show the CTYI results from the Myers Briggs Type Indicator. Chart 4.3.1 shows the overall CTYI types and we can see four types are the most common, ENFP (19%), INTP (15%), ENTP (14%) and INFP (11%). These four types are highlighted in red in Chart 4.3.1. The overall CTYI male scores are illustrated in Chart 4.3.2. The overall CTYI female scores are illustrated in Chart 4.3.3.

Chart 4.3.1: CTYI Myers-Briggs results (by %)

Chart 4.3.2 CTYI Male MBTI results

Chart 4.3.3 CTYI Female Myers-Briggs Scores
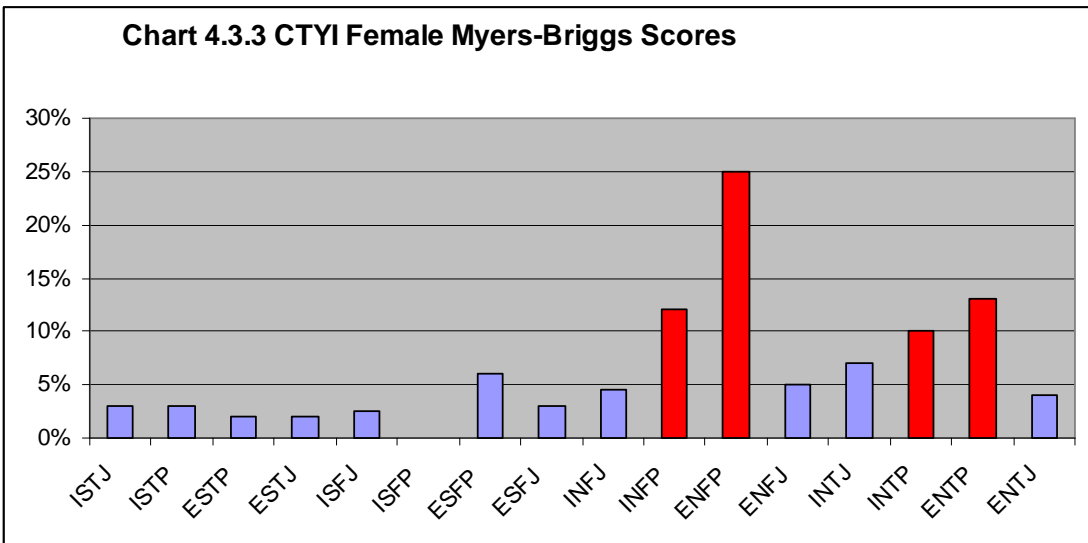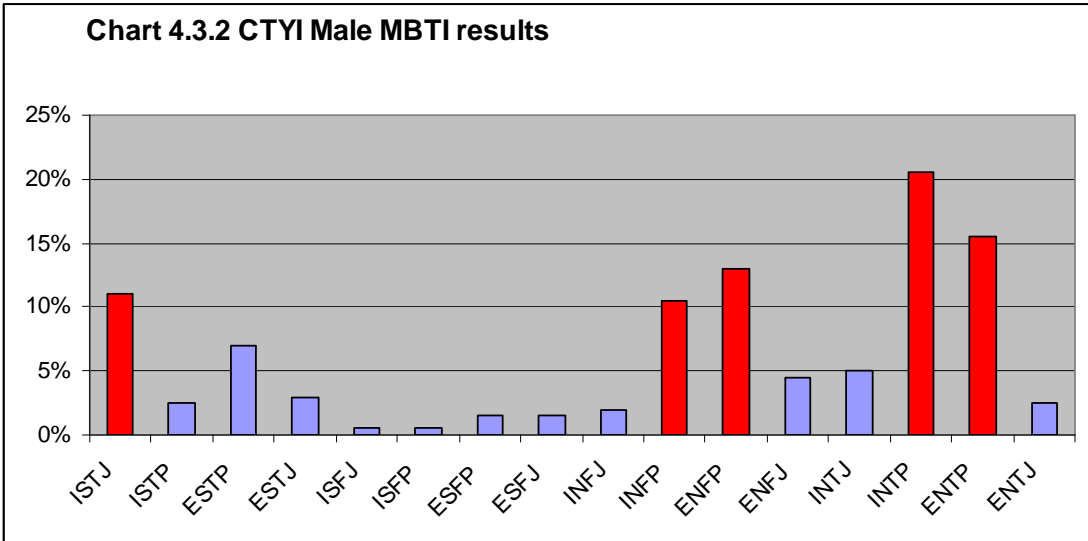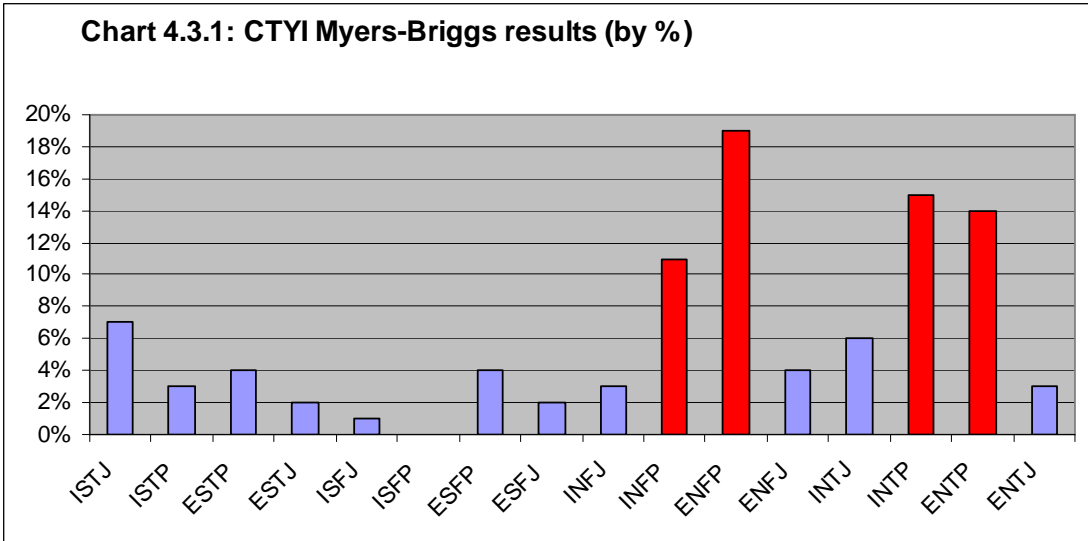
The CTYI scores on individual subscales of Myers-Briggs are listed on Tables 4.3.1, 4.3.2, 4.3.3 and 4.3.4

Table 4.3.1 CTYI Sensing-Intuition (S-N) scale

	Sensing Types	Intuitive Types
Overall	24.0%	76.0%
Male	26.5%	73.5%
Female	21.5%	78.5%

Table 4.3.2 CTYI Extrovert-Introvert (I-E) scale

	Extrovert Types	Introvert Types
Overall	53.8%	46.3%
Male	48.5%	51.5%
Female	59.0%	41.0%

Table 4.3.3 CTYI Thinking-Feeling (T-F) Scale

	Thinking Types	Feeling Types
Overall	54.8%	45.3%
Male	66.5%	33.5%
Female	43.0%	57.0%

Table 4.3.4 CTYI Judgment-Perception (J-P) Scale

	Judging Types	Perceptive Types
Overall	29.5%	70.5%
Male	29.0%	71.0%
Female	30.0%	70.0%

Summary of Findings

These findings can be summarized under two of the emerging research themes

Theme 2: Level of Academic Satisfaction and Challenge at CTYI and

Theme 3: Attitude and Academic Challenge at School

Firstly we can look at the four most common overall CTYI types, INFP, ENFP, INTP, and ENTP. Myers (1980) describes INFP's as perfectionists where their feelings are engaged and are happiest with individual work involving their personal values. In a school setting they tend to be very idealistic and devoted to causes. They prefer classes where they are allowed freedom of expression including Creative Writing, Music and Drama. Myers describes INTP's as students who are prolific in theoretical

and scientific subjects and brilliant in exam situations. They tend to value teachers who are experts in their field and who recognise their good thinking ability. We can see already that these two sets of students require hugely different pedagogical approaches. I believe that INFP's and INTPs may be more suited to the specialist subjects within the CTYI programme where they can work at their own pace.

Myers describes ENFPs as students who are able to put their hand to anything that interests them and who have a lot of imagination and initiative for originating projects and plenty of impulsive energy to carry them out. They like teachers who recognise their ability to work well with other students and praise them regularly. Myers describes ENTPs as students who enjoy solving new and challenging problems and tend to be good at lots of subjects. In school they work well with others and their extroverted attitude gives them an upbeat way of looking at life. In my opinion the ENFP and ENTP high ability types are those that get on well at school and relate well to their classmates because of their extroverted nature and enthusiasm for learning. The INFP and INTP types will have more difficulty at school because of their introverted nature where they may not be able to get on as much with their peers and may feel stifled by the curriculum.

Research (Sak, 2004) has shown that the four most common types of non gifted students are ESTJ (14.97%), ESFJ (11.97%), ESFP (9.37%) and ISTJ (6.92%). Comparing them to the four main CTYI types, INTP, INFP, ENTP and ENFP shows that no type is common to the two groups. Myers describes ESFP's as students who are typically care-free and fun loving and who are very energetic students who feel a need to entertain others. They need teachers who recognise their need for activity and

to express themselves socially. Myers describes ISTJ's as students who earn success through concentration and thoroughness. They respond best to a school environment that is predictable and traditional.

Myers describes ESTJ's as linear learners with a strong need for structure. They like practical subjects and have a traditional outlook towards education. Finally Myers describes ESFJ's as students who value routine and have little interest in abstract things. They prefer teachers who are good communicators and put a tight structure on things. Most of the common non gifted types tend to respond well to structure while the most common high ability types prefer an environment which allows freedom for expression.

As with previous research (Gallagher, 1990; Moore & Parker, 1996; Swiatek & Cross, 2007) the CTYI group (table 4.3.1) show a preference for Intuition (N) over Sensing (S). Some 76% of Irish high ability students in this sample fell into the Intuitive preference. They also show a large preference (table 4.3.4) for Perception (P) over Sensing (S) with 70.5% falling into this category. Again this is consistent with previous research with Intuitive-Perceivers (NPs) being very common in other studies (see above). In this group NPs make up 59.4% of the overall CTYI population for this study.

If we look at table 4.3.2 we see that there is a slightly higher proportion of Introverts (I) over Extraverts (E) within the CTYI population. In a non gifted population there would normally be about 75% extraverts (MacDaid, McCauley & Kainz, 1986). Jung (1971) describes extraverts as those students who tend to focus on the outer world of

people and external events. Extraverts prefer to communicate by talking and learn best through doing and discussing. Introverts are described as those who prefer to focus on their inner world of ideas and experiences. They feel a need to internalise ideas and are often contemplative. They prefer to communicate by writing and learn best by reflection. They have a depth to their interests and may be private and self-contained. They do not like interruptions in their work and prefer to have things figured out before talking about them.

This has huge implications for finding the best education for high ability students. High ability students in this research have been shown to have a preference for Introversion (I) and Intuition (N). Intuitives or N types tend to do better in school early on as they have a preference for working with symbols and concepts. Early mathematical and verbal theory tends to come to them quickly. They need to be stimulated and prefer an imaginative approach. They tend to enjoy abstract concepts so they can learn theories quickly. McCauley and Natter (1974) reported that intuitives liked self paced learning and courses to allow them to study on their own initiative. Myers also asserted that the possibility of one being intuitive-introverted (IN) increases as one's academic giftedness increases. Myers and McCauley (1985) believed that psychological type is related to aptitude and achievement. People who preferred introversion and intuition showed greater academic aptitude than those who preferred extraversion and sensing. Sachs (1978) reported that intuitive types report feeling academically superior to their peers. This will be examined in the next section that shows the results from the Piers-Harris Children's Self-Concept Scale where it demonstrates that students from this study have a higher academic self-concept than non gifted students .

Section 4.4 : Piers Harris Self Concept Scale

Overview

The Piers Harris Children's Self Concept scale was developed in the 1960's to provide a self report instrument for the assessment of self concept among adolescents. The instrument's stature is reflected in more than 500 citations in professional journals and books in psychology, education and the health science. It is widely used in gifted education. The Piers Harris 2 is a 60 item self-report questionnaire designed for administration to children from the ages of 7 to 18 years. The Piers Harris 2 contains 60 statements expressing how people may feel about themselves. Respondents are asked to indicate whether each statement applies to them by choosing yes or no answers. The results give the participant an overall self concept measure called the Total (TOT) score. Within this there are six domain scales which assess specific components of self concept. The domain scales include Behavioural Adjustment (BEH), Intellectual and School Status (INT), Physical Appearance and Attributes (PHY), Freedom from Anxiety (FRE), Popularity (POP), and Happiness and Satisfaction (HAP).

Self Concept Scales

Total Score (TOT).

The TOT score is a measure of general self concept. Higher scores indicate favourable self concept and lower scores are associated with lower self concept. High scores are associated with a T score of above 60 and children who score above this are confident in their abilities and have a typically strong self appraisal. These

students are usually involved in numerous activities and will try out new tasks. They are likely to describe themselves as happy and free of worry. Scores between 40 and 59 are considered to be in the average range. Children and adolescents in this range are reporting a level of self esteem similar to that of most students in a standardised sample.   Scores in this range usually represent a balanced self evaluation with acknowledgement of both positive and negative aspects of self. Scores below 40 are considered to be in the low range and are characteristics of children with doubts about their self worth. These children usually view themselves as less talented than their peers and may be reluctant to try out new activities for fear of lack of ability. Children with low TOT scores may report as being anxious, depressed and generally unhappy.

Behavioural Adjustment (BEH).

The BEH scale measures admission or denial of problematic behaviours. Children who score above 55 on the BEH scale perceive themselves as well behaved and able to comply with rules and expectations at home and in school. Scores between 40 and 55 evaluate themselves as well behaved but do acknowledge some difficulties with their conduct. Scores in this range are considered to be average within the general population. Scores below 40 indicate that the children are acknowledging significant behavioural difficulties. They may see themselves as frequently causing trouble and being unable to adhere to the standards of conduct set by parents and teachers.

Intellectual and School Status (INT).

The INT scale reflects a child's assessment of his or her abilities in relation to intellectual and academic tasks. The scale covers general satisfaction with school and future expectations on achievement. Children who score above 55 are expressing confidence in their general intellectual abilities and in their performance on academic tasks. These students perceive themselves as working well in the school and having the admiration of peers and family members. Students scoring between 40 and 55 on this scale fall within the average range. They view themselves as performing acceptably well in the academic realm but acknowledge a few difficulties with academic tasks. Students scoring below 40 on this scale are acknowledging difficulties in school related tasks. Children with low scores on this scale may feel that they don't fit in at school or may indicate unrealistically high expectations from themselves or their parents.

Physical Appearance and Attributes (PHY).

The PHY scale measures how a child feels about their physical appearance as well as their ability to express ideas. Children who score above 55 on this scale are expressing general satisfaction with their appearance. They perceive themselves to be popular with their peers and that their friends are interested in what they have to say. Children who score between 40 and 55 are in the average range and report both negative and positive feelings of their appearance and personal attributes. Students scoring below 40 on this scale are likely to have poor self esteem in relation to their body image. They may feel that they are unattractive or be bothered by aspects of

their physical appearance. They may also feel that they are not well liked by their peers.

Freedom from Anxiety (FRE).

The FRE scale measure a range of specific emotions such as worry, nervousness, shyness, fear and a general feeling of being left out of things. Children scoring above 55 on this scale feel that they are not bothered by unpleasant mood states such as sadness, nervousness and worry. Children who score in the average range in this scale between 40 and 55 report mostly positive emotional states but acknowledge a few difficulties related to their mood. Students who score below 40 on this scale may feel anxious about specific events or they may have a higher generalised sense of anxiety than most people. Low scores on this scale may also be associated with feeling left out socially or dissatisfaction with appearance.

Popularity (POP).

The POP scale represents an analysis of the child's social functioning. It covers content such as perceived popularity, ability to make friends and feelings of inclusion in activities. Children who score above 55 on this scale perceive themselves as being successful in relationships with their peers. They feel well liked by their peers and report satisfaction with the number and quality of their friendships. Children who score between 40 and 55 on this scale are mostly satisfied with their social functioning but acknowledge some difficulties with peer interactions. They are mostly within the average range in relation to feeling included. Students who score

below 40 on this scale often feel unhappy with their social relationships. They may feel that they don't have enough friends or in extreme cases no friends at all. These scores may reflect lack of interpersonal skills or traits that tend to isolate the child from others.

Happiness and Satisfaction (HAP).

The HAP scale reflects feelings of happiness and satisfaction with life. Children who score above 55 on the HAP scale see themselves and their lives in a positive way. They report an overall sense of wellbeing. Children who score in the average range between 40 and 55 on this scale feel generally happy with their circumstances while also reporting some negative appraisals. Children who score below 40 on this scale are generally unhappy with themselves and dissatisfied with their life. These students may feel that they don't relate well to others and may be self critical in relation to physical appearance and their own personal qualities.

CTYI Overall Piers Harris Results

There were 148 males and 152 females as part of the sample group. The table below shows the mean scores for the overall group and the male and female means.

Table 4.4.1: Piers Harris Mean Scores for CTYI.

PIERS HARRIS SUBSCALES	OVERALL CTYI MEAN	MALE CTYI MEAN	FEMALE CTYI MEAN
Total (TOT)	48.41	48.52	48.30
Behavioural Adjustment (BEH)	50.51	49.93	51.06
Intellectual and School Status (INT)	49.78	49.62	49.92
Physical Appearance and Attributes (PHY)	47.47	48.61	46.78
Freedom from Anxiety (FRE)	48.69	49.68	47.72
Popularity(POP)	47.47	47.03	47.91
Happiness and Satisfaction (HAP)	47.33	47.25	47.61

From the above table we can see that the overall mean scores in all subscales fall within the average category of 40-54. The table below, 4.4.2 shows the scores within the above average (55+), average (40-54) and below average (less than 40) ranges. We can see here that Freedom from Anxiety (FRE) at 24.7%, Behavioural Adjustment (BEH) at 24.3%, and Happiness and Satisfaction (HAP) at 24.3% represent the categories with the highest above average scores. Conversely the subscale of Popularity (POP) has the highest percentage of below average responses (23%).

Table 4.4.2: Overall CTYI subscale Scores in each category by %

PIERS HARRIS SUBSCALES	ABOVE AVERAGE	AVERAGE	BELOW AVERAGE
Total (TOT)	10.3%	74.0%	15.7%
Behavioural Adjustment (BEH)	24.3%	63.7%	12.0%
Intellectual and School Status (INT)	22.0%	69.3%	8.7%
Physical Appearance (PHY)	22.7%	60.0%	17.3%
Freedom from Anxiety (FRE)	24.7%	62.0%	17.3%
Popularity(POP)	18.0%	59.7%	23.0%
Happiness and Satisfaction (HAP)	24.3%	57.7%	18.0%

CTYI Piers-Harris Male/Female Scores

Table 4.4.3 shows the above average, average and below average scores on each of the subscales for males and females.

Table 4.4.3: CTYI Subscales by male/female

PIERS HARRIS SUBSCALES	ABOVE AVERAGE		AVERAGE		BELOW AVERAGE	
	Male	Female	Male	Female	Male	Female
Total (TOT)	7.2%	13.2%	78.6%	69.7%	14.2%	17.1%
Behavioural Adjust. (BEH)	21.6%	27.0%	65.6%	61.8%	12.8%	11.2%
Intellectual and School Status (INT)	20.3%	23.7%	71.6%	67.1%	8.1%	9.2%
Physical Appearance (PHY)	27.7%	17.8%	54.1%	65.8%	18.2%	16.4%
Freedom from Anxiety (FRE)	25.7%	23.7%	59.4%	56.6%	14.9%	19.7%
Popularity(POP)	19.2%	17.8%	55.1%	60.4%	25.7%	20.4%

Happiness and Satis. (HAP)	25.0%	23.7%	56.1%	58.6%	18.9%	17.1%

CTYI Piers Harris scores compared to American national sample

Table 4.4.4 shows the mean scores for a standardized Piers Harris sample taken from high school students across the United States. The highlighted areas show the mean scores for 13-14 yr olds and 15-16 yr olds. Table 4.4.5 shows the overall CTYI means in the first column with a breakdown of the 13-14 yr old means and 15-16 yr old means in the next two columns. Statistical analysis was done using a one sample T-test using the individual subscores means from the 13-14 year olds and the 15-16 year olds from the CTYI students and comparing these with the means from the Piers sample. Table 4.4.6 and 4.4.7 below documents the results from these tests. Finally Table 4.4.8 compares the CTYI means with the Piers sample.

Table 4.4.4: Average Scores by Age Group in Piers Harris Standardisation Sample

	7-8 yrs	9-10yrs	11-12yrs	13-14yrs	15-16yrs	17-18yrs
Total (TOT)	51.2	51.5	51.3	48.4	48.6	49.1
Behavioural Adjustment (BEH)	51.2	50.9	51.4	47.8	47.6	50.1
Intellectual and School Status (INT)	53.3	52	50	47.5	48.1	49.2
Physical Appearance and Attributes (PHY)	50.4	50.2	50.2	48.4	50.6	49.5
Freedom from Anxiety (FRE)	49.9	50.6	50.7	50.4	48.2	48.8
Popularity(POP)	47.7	50.3	51.2	50.5	50	48.6
Happiness and Satisfaction (HAP)	50.7	51	50.7	47.9	48.5	48.8

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Table 4.4.5: Comparison of CTYI mean scores with Piers Harris 13-16 yr olds.

PIERS HARRIS SUBSCALES	OVERALL CTYI	PIERS 13-14 YRS	PIERS 15-16 YRS
Total (TOT)	48.41	48.4	48.6
Behavioural Adjustment (BEH)	50.51	47.8	47.6
Intellectual and Social Status (INT)	49.78	47.5	48.1
Physical Appearance and Attributes (PHY)	47.47	48.4	50.6
Freedom from Anxiety (FRE)	48.69	50.4	48.2
Popularity(POP)	47.47	50.5	50.0
Happiness and Satisfaction (HAP)	47.33	47.9	48.5

Table 4.4.6: Comparison on T-test scores for CTYI 13-14 yr old students with piers Harris standardised scores.

PIERS HARRIS SUBSCALES	CTYI 13-14 YR MEAN (N =102)	PIERS 13-14 YR MEAN	ONE SAMPLE T TEST
Total (TOT)	48.61	48.4	n/s
Behavioural Adjustment (BEH)	51.06	47.8	0.00
Intellectual and Social Status (INT)	50.13	47.5	0.02
Physical Appearance and Attributes (PHY)	46.75	48.4	n/s
Freedom from Anxiety (FRE)	48.81	50.4	n/s
Popularity(POP)	47.58	50.5	0.04
Happiness and Satisfaction (HAP)	47.70	47.9	n/s

Table 4.4.7: Comparison of T-test scores for CTYI 15-16 yr old students with Piers Harris standardised scores.

PIERS HARRIS SUBSCALES	CTYI 15-16 YR MEAN (N=198)	PIERS 15-16 YR MEAN	ONE SAMPLE T TEST
Total (TOT)	48.29	48.6	n/s
Behavioural Adjustment (BEH)	50.16	47.6	0.00
Intellectual and Social Status (INT)	49.63	48.1	0.01
Physical Appearance and Attributes (PHY)	47.84	50.6	n/s
Freedom from Anxiety (FRE)	48.62	48.2	n/s
Popularity(POP)	47.37	50	0.00
Happiness and Satisfaction (HAP)	47.20	48.5	0.05

Table 4.4.8: Comparison of CTYI Male-Female Means with Piers Sample

PIERS HARRIS SUBSCALES	MALE CTYI	MALE PIERS	IND TTEST	FEMALE CTYI	FEMALE PIERS	IND TTEST
Total (TOT)	48.52	49.6	n/s	48.30	50.4	0.01
Behavioural Adjustment (BEH)	49.93	48.2	0.02	51.06	51.3	n/s
Intellectual and Social Status (INT)	49.62	48.7	n/s	49.92	51.0	n/s
Physical Appearance and Attributes (PHY)	48.61	49.6	n/s	46.78	50.1	0.00
Freedom from Anxiety (FRE)	49.68	51.6	0.01	47.72	48.1	n/s
Popularity(POP)	47.03	49.6	0.00	47.91	50.2	0.04
Happiness and Satisfaction (HAP)	47.25	49.1	0.02	47.61	50.0	0.04

Summary of Piers Harris Results

Theme 5: Comfort with Ability and the Term Gifted to describe that Ability.

Firstly we can see from table 4.4.1 that all the scores on the self-concept scale fell within the normal (40-54) range. The highest overall mean self concept score on the subscales was for Behavioural Adjustment (BEH) while the lowest score was for Happiness and Satisfaction (HAP). High scores on the Behavioural Adjustment scale indicate a measure of good behaviour and ability to comply with rules. Happiness and Satisfaction (HAP) measures a child's positive outlook in life.

For male students the highest score was for Behavioural Adjustment and the lowest was for Popularity (POP). For the girls the highest score on the subscales was for Intellectual and Social Status and the lowest was for Happiness and Satisfaction

(HAP). Intellectual and School Status looks at the child in relation to how they perceive themselves academically while Popularity (POP) looks at the child's perception of their ability to relate with others. Running an independent t test to compare means for male and female students showed no significant differences on any of the scales for the males and females in this sample. This is consistent with some other studies in this area (Tong & Yewchuk, 1996; Karnes & Wherry, 1981).

Table 4.4.2 shows the breakdown of overall students who fell in the above average, below average and average ranges on all the subscales of the Piers-Harris. The subscales with the highest above average scores were Freedom from Anxiety (FRE) (24.7%), Happiness and Satisfaction (HAP) (24.3%), and Behavioural Adjustment (BEH) (24.3%). The highest percentage with a below average subscale score for all students came from Popularity (POP) at 23.0%. The lowest percentage with a below average subscale score was Intellectual and School Status at 8.7% which we might expect from a group of high ability students.

Table 4.4.3 examines the CTYI above average, average and below average subscale scores by male and female breakdown. There are differences in the Physical Appearances and Attributes (PHY) subscale on the above average level. PHY measures how a child feels about their physical appearance and 27.7% of boys in the sample rated themselves as above average on this scale compared to 17.8% of girls. In Behavioural Adjustment (BEH) some 27.0% of girls found themselves above average compared to 21.6% of boys. In the Total (TOT) score some 13.2% of girls saw themselves as above average compared to only 7.2% of boys. Looking at the below average scores some 19.7% girls rated scored below average on the Freedom

from Anxiety (FRE) scale compared to 14.9% of boys. The FRE scale measures feelings of worry, anxiety or feeling left out of things. On the Popularity scale (POP) some 25.7% of boys rated as below average compared to 20.4% of girls. This ties in with previous studies where some researchers have suggested that gender differences occur in specific dimensions of self-concept while not necessarily being observed in the global score (Harter, 1983; Piers, 1984). Popularity (POP) measures the ability to make friends and inclusion in social settings. This low rating is consistent with the finding from the primary and secondary school questionnaires where both primary and secondary school students reported a low level of support from their classmates in relation to their ability. It also ties in with the high level of introverts reported at CTYI from the MBTI study. These students may have a difficulty connecting with others and often feel more comfortable working individually.

From table 4.4.6 we can see that the CTYI students in the 13-14 year old age group show significantly higher self concept scores on the Behavioural Adjustment (BEH) and the Intellectual and School Status (INT) that the regular students. This is consistent with the Hoge and Renzulli (1993) study that found that in general high ability students tend to have a higher academic self-concept than their non gifted peers. However the CTYI 13-14 yr old group show a significantly lower self concept score on the Popularity (POP) scale. The other subscale scores were non significant.

From table 4.4.7 we can see that in same way as the 13-14 year old sample that the CTYI students in the 15-16 year old category show a significantly higher self concept than the 15-16 year olds in the Piers sample in Behavioural Adjustment and

Intellectual and School Status. Similarly to their 13-14 year old counterparts the CTY 15-16 year old students also show a significantly lower self concept in Popularity (POP). Additionally they also show a significantly lower self concept in Happiness and Satisfaction (HAP). Again this is consistent with a recently study by Hoogeveen, Van Hell & Verhoeven (2009) where it was found that accelerated secondary school students had more positive self-concepts concerning school in general but a lower social self-concept.

Table 4.4.8 compares the overall male and female means of the CTYI group with the overall means of the male and female students on the Piers sample. The CTYI male students show a significantly higher self concept score than the male group in the Piers sample in Behavioural Adjustment (BEH). They also show a significantly lower self concept than the male Piers group in Freedom from Anxiety (FRE), Popularity (POP) and Happiness and Satisfaction (HAP). Looking at the female group the CTYI students score significantly lower than the Piers sample on the Total (TOT) scores. They also score significantly lower than the Piers group on the subscale scores of Physical Appearance and Attributes (PHY), Popularity (POP) and Freedom from Anxiety (FRE). These results are consistent with a study by Klein & Zehms (1996) where it was found that older gifted girls had a significantly lower global self concept than younger gifted girls. The Piers data in table 4.4.4 shows that all students show a slight drop in their self concept scores between the ages of 13 to 16 years.

All of this information links to the overall theme of how gifted students may be comfortable with their ability and will be analysed in more detail in the next chapter.

Section 4.5 : Interview data

Background

There were four separate groups of 6 people comprising each group. Group 1 was the primary school students and are represented in the data by S1-S6. Group 2 were the primary school parents and are represented in the data by P1-P6. Group 3 was the secondary school students are they are represented in the data by S7-S12. Group 4 was the secondary school parents and they are represented in the data by P7-P12.

From the data analysis some 5 key themes emerged from the four groups. These were

Theme 1: Attitude towards Attending CTYI and why they Attend

Theme 2: Level of Academic Satisfaction and Challenge at CTYI

Theme 3: Attitude and Academic Challenge at School

Theme 4: Ranking and Ability at School in relation to Peers

Theme 5: Comfort with Ability and Comfort with term Gifted.

Group 1: Primary School Students

Theme 1 : Attitude towards attending CTYI and why they Attend.

All 6 students said they had a positive attitude towards attending CTYI.

"I like going to the classes. They are very good." S4.
"I like the idea of doing classes that we can't do at school. We don't do journalism at school." S6.
"My Mam asked me if I wanted to come and I said yes. It is my decision. I like coming to DCU." S2

There were different responses in relation to what they wanted to achieve. Some wanted to learn more for themselves while others saw it as a help for schooling in the future while one was undecided. The humanities students seemed to aspire to more general achievements while the science students were more focused academically.

"I would like to become a better writer." S1
"Learn how to write articles for newspapers and television." S2
"Learn some new stuff." S3
"I want to do well in secondary school in my Junior and Leaving Cert." S4
"It would probably make chemistry easier in secondary school." S5
"I don't know really." S6

Theme 2: Level of Academic Satisfaction and Challenge at CTYI

All students believed they experienced some level of academic satisfaction.

"Sometimes the classes are challenging like forensics but mostly you go at your own pace. That's what I like about it." S1
"When I did the sports-science course I learned a lot about the kinds of foods you should eat and how injuries happen. And the courses I did in Athlone; there was one about journalism and there was a creative writing one. That was all about how to write stories and the different types of stories that there are. The classes are great." S3
"The classes are really good and I really like the experiments."S4

There was a mixture of responses in relation to whether the students felt challenged on the course.

"The questions here are harder than school."S1
"Sometimes I am challenged but sometimes not. I just take down lots of notes." S5
"Yeah, this is pretty hard. I'm learning lots of new things." S4
"I don't feel too challenged in this course but other ones have bee harder." S2

Theme 3: Attitude and Academic Challenge at School

Most of the students were positive towards attending school.

"I like going to school." S1
"It is good." S2
"It's good. I like it." S3
"Usually it's very good." S5

Most of the students qualify this by saying they sometimes feel a lack of challenge at school.

"At school I am sometimes happy and sometimes bored. Sometimes I look forward to going and sometimes I don't." S6
"We learn new things and it's good overall but sometimes it can be a bit boring."S4.
"School is sometimes hard and sometimes easy." S2

Half of the students said Maths was their favourite subject at school with the other picking Geography, English and Swimming. All of then said they would like to do more of their favourite subjects at school as they often don't find it challenging enough.

"We don't do enough Maths at school and it's all very simple." S2
"I would like more English challenges. I find English a bit easy at school." S1
"I like geography but this year we are mostly doing English, Maths and History."S4

Theme 4: Ranking and Ability at School in relation to Peers.

Most of the students would rank themselves at the top of their class in school in the subjects that they were good at but not as highly in other subjects.

"I would be better than most of the students in my class although there are some children who would be better than me. I'm better at certain subjects. I'm better at maths and reading." S1
"Probably first in Maths and middle in English and Irish." S2
"Second or third in Maths, probably around the middle in Irish." S3
"Third in Maths and about seventh in English." S5

All of the students that were interviewed said they liked sports. Some perceived themselves to be good at sports while others didn't think they were that good at them but liked participating.

"I love sports. I do gymnastics." S5
"I'm good at sports. I would be I the top five in my class. I play football." S3
"I'm not the best at sports but I like participating I them." S2

Theme 5: Comfort with Ability and Comfort with term Gifted

All of the students said they were comfortable with their ability.

"Yes. It's just the way I am." S2
" It's good, I like it. I like reading, and I'm able to understand it so it makes books seem better. It's also very good in sports, as you can learn from the professionals, and if you're smart you can find out all the different statistics." S4
"I'm very happy with it." S1

Half of the students said they liked to work independently while the others preferred to work in groups.

"I prefer to do it myself because when I do it by myself there's no noise around me and I can concentrate better." S2
"On my own because you can concentrate more and there's less talking." S3
"I prefer to work with my friends." S6

"For one thing you have a friend with you, which is good, and they can help you out with the different things. Especially if you have a project where you have to draw something and you're not very good at art but you're very good at facts, they could maybe draw a picture of a dancer and you could write a bit about a famous theatre where they dance." S4

Only one of the six students had heard of the term giftedness to describe ability. As this student explained.

" To me it means being very good at things. I'm not very good at some things, but that's what they say it means. I like it, I'm happy being told I'm very good at things. I would consider myself gifted in things like Maths and English but not Art." S4.

The data from this group of interviewed primary students is largely consistent with the questionnaire data for primary students. They show a high level of academic satisfaction with CTYI and a positive attitude towards attending. At school they have a generally positive attitude but experience a lack of challenge in subjects that they enjoy. They rank themselves as better than their peers in subjects they believe they are good at but not in others. They are comfortable with their ability but the interviews revealed that they do not really understand the concept of giftedness so this explains why they don't associate it with a negative stereotype.

Group 2: Primary School Parents

Theme 1: Attitude towards attending CTYI and Why they Attend.

All parents reported that their children had a positive attitude towards attending the class.

"Definitely positive, she looks forward to it." P3
"It's extremely positive." P1
"Initially he was a little apprehensive but after the first class he loved it." P6

Parents further reported a level of enthusiasm to get to the classes.

"From when she comes out at half five, until next Wednesday she's so looking forward to it and really happy." P1
"Hurry up we're going to be late. Rushing in from school and ditching all his school stuff." P5

Most of the parents believed that their children attended to learn something new.

"He's very varied interests, he's fascinated by a lot of things and he likes to know, and that's it. He wants to do all sorts of things – he wants to do debating, and lots of other things as well, it's not just the sciences." P5

"When he goes to the library the first section that he visits is the reference section. He likes learning. I think he thought this would be more of the same." P2

"He wants to learn something new and gain more knowledge. He loves facts and figures." P6

Other parents noted that their children went to have fun.

"She will look at the list and say I'll try this, it looks like fun." P3

"I think she was hoping for a chemistry lab with white coats and bubbling jars."P4

Theme 2: Level of Academic Satisfaction and Challenge at CTYI

Most of the parents said their child had a high level of academic satisfaction with the classes.

"He is very satisfied. It challenges him a lot more than school. Initially he took writing which would be one of his favourite subjects and he really enjoyed it. Then he took marine biology and I think he learnt a lot." P6

"I think he's thoroughly enjoyed it." P5

"I think he's satisfied, I think he's happy. I think academically he's finding it difficult in so far as it's a challenge and that's good for him." P2

One parent didn't really feel that academic satisfaction was that important for her child at that particular time. As she explains

"I not really concerned with her academic achievements as yet as this is only her first course, and it runs until she's 16 anyway. I'm more interested in her finding a place where she fits in and where her work level is to her interests." P1

Theme 3: Attitude and Academic Challenge at School

There were mixed responses from parents in relation to their child's attitude towards attending school. Three were very positive.

"He wants to learn new things so he likes school because of this." P6

"She's in a lovely school, and she has a lovely teacher and there's lovely children in her class, so for that reason she likes going." P3

"Very positive." P4

The other parents in contrast felt their child's attitudes were quite negative towards attending school.

"When he gets up in the morning he doesn't want to go to school." P2

"Negative this year. Previously she loved school, loved learning until she got to 8/9 years of age and then she had no interest at all and she just didn't want to go, whereas beforehand she would have had a panic-attack if we were late in the traffic." P1

"He's in sixth class so he would give out a bit about going but maybe that's the year that's in it. He has a brother in secondary and they have longer holidays so that frustrates him." P5

Most of the parents felts that their child was not that satisfied academically at school.

"He's not very satisfied. He finds things a little easy. All I hear in parent teacher meetings is how good he is in class yet he comes home most days frustrated because they haven't done much." P6

"She breezes through school, she would find school too easy. There'll be times at school where she won't try, and she'll drop back because of that, because she doesn't have to put an effort into it." P3

"There's a couple of things he finds hard, but I think that's because he's switching off. Spelling, reading, he finds that so easy . He says he finds maths hard, but when he gets a worksheet he just flies through it and I don't think he's challenged sufficiently in school." P2

"Not at all satisfied. It's so below her ability level and they're not interested in acceleration or doing anything for her, enrichment classes or anything. So we're actually moving schools in September." P1

Theme 4: Ranking and Ability at School in Relation to Peers.

Three of the parents picked English as their child's favourite subject while two chose Maths. One said that they didn't really have a favourite as he is good at them all but mentioned that he likes Italian which he takes after school because it's a different challenge for him and he likes learning something that nobody else in his school is learning. All the parents who said that their child's favourite subject was either Maths or English feel that they do not get enough chance to explore this ability at school.

"She's good at English but gets no opportunities at school relative to her ability. That's why I found the CTYI course so she could get that extra challenge." P1

"He probably doesn't get to do enough Maths that stretches him at school which is a pity." P2

Most of the parents would rank their child as being the best or one of the best in class at subjects that their child liked. This sometimes would be their own opinion but would mostly be validated at parent teacher meetings.

"She is the best in her class at English." P1

"I'd say she would be in the top three at Maths." P4

"I'd say he is in the top three in Irish, English and Maths. All of the teachers tell me he's very bright but they won't discuss it in relation to other children in his class" P5

"I think she's probably one of the best in English and the teacher tells me she's one of the best in maths as well." P2

Nearly all of the parents felts that the children were also amongst the best in class at other subjects in relation to their peers with the exception of sports.

"He likes Maths but I think he sees it as something you do at school. He would be one of the best in his class at it though." P6
"She's not too fond of maths, maths is one thing that she might have to work on. Although her teacher in school says that she's in the top two or three in the class, she scored 98 in her recent test in maths, which will give you an idea." P2
"He's good at English as well, he would probably be in the top three in his class in that as well." P3
"No she's not sporty at all, she doesn't go in for sport." P1
"He plays soccer but he goes for the social aspect of it. He will stand and let the ball go by if he is chatting to someone on the pitch." P2
"She likes sports but she's not very sporty. She doesn't realise that but she's not sporty." P3

Theme 5: Comfort with Ability and Comfort with Term Gifted

All of the parents believed their child was comfortable or relatively comfortable with their ability.

"I think he's comfortable with his ability. Overall I think he's happy but he needs more than the school can give him." P2
"I think he is. I think he's a child who doesn't know he has it which is not a bad thing to be honest." P5
"She's very comfortable with her ability." P1

Some parents felt that ability was something that their child was only starting to come to terms with as they grew older.

"She's getting there. She's not a confident young girl. Every year she gets more confident." P3
"I think he's happy enough when he does things, he doesn't always have the confidence though. He would often ask, do you think I'm clever enough for that or am I strong enough for that." P5

Most of the parents felt that their child were comfortable working on their own ad prefer that to working in groups.

"Yes, he gets into things on his own and is comfortable with that." P5
"I think he likes to work on his own." P3
"She works well on her own at home. She's the youngest of four and there's a bit of a gap so she is used to being on her own in ways." P4

While some parents said they were as comfortable working in groups others expressed concerns.

"He can work in groups but ends up doing the work on his own." P6

"If her friends were in the group then she would be happy. But she isn't really a leader." P4

"She likes the social part of groups but she likes things being done in a certain way, her way." P3

There were different responses to the parents feelings on the term gifted. Those with an academic or teaching background seemed the most comfortable with it as they had more experience with it.

"I have no problem with that concept. Basically I 'm a trainee teacher and I see a bell curve and there's kids who are gifted and there are kids who aren't and there are kids who fall in the middle so I've no problem in seeing some kids as gifted and some kids as not, it's just the way they are." P2

"I'm probably a wee bit different from your other parents because I've actually done my masters in gifted education. So my perception of it was that she was born with an ability to see things in a different way than other people and that's a good thing." P1

Others were not that comfortable with the concept of giftedness and the use of the term gifted.

"I'm not altogether too comfortable with it. I think it has elitist connotations. I can see how it applies to Beethoven and Einstein but maybe I'm confusing it with genius." P6

"It's not one I like in particular, because I think everyone's gifted in their own way. However, I don't know that there's really another word to describe somebody whose overall talents are at a certain level. I suppose it describes it very well but there's a label, a negative part with it." P5

"I now feel that for some kids it can be a burden, I just know from other kids. I feel that she might not benefit as well as other kids because socially she's fairly fulfilled, with sports and everything. But if I had a kid who might be very bright in school, but socially might be challenged, I feel this would help them. But my idea of being gifted has changed, when I started out I would have been in awe of the kid, whereas now I realise that can be a cross to bear." P4

Five of the parents interviewed would use the term gifted to describe their child although in different contexts.

"I probably would call my son gifted. I had my son assessed by a psychologist and we had a discussion and based on an experts opinion I believe he falls into this category." P5

"My perception of it was that she was born with an ability to see things in a different way than other people, to want to know the reasons behind things – you just can't be told that something's there and that's just the way it is, you need to know why it is, you need to touch it and smell it and see it. She also feels that she's here for a reason, that she's special." P1

"I would describe him as gifted but then I am his parent."P2

One parent did not classify her child as academically gifted.

"She's a good all rounder although I wouldn't have thought she was gifted. In fact I was very surprised she passed the assessment."

One parent described it like this.

"If it means someone who is academically in the top 5% of the population then yes as I think he falls into that category and he is lucky because of it. If it means someone who breezes through school and life without any struggles academically because they are so bright then no, at least I hope not as that would be difficult for him." P6

Overall the parents here report a high level of academic satisfaction with CTYI and a positive attitude towards attending. Some parents note an enthusiasm in their child for attending CTYI that is lacking when attending school. Some parents reported a negative attitude from their children towards school. This seemed to increase as the child got older. The parents believe their children are considerably better than their peers in all subjects not just ones that their children liked. Most of the parents were comfortable with their child's ability although some were wary of the term gifted to describe that ability. The parents who had a background in some sort of educational profession were most comfortable with the term gifted.

Group 3: Secondary School Students

Theme 1: Attitude towards attending CTYI and why they Attend.

All of the secondary school students had a positive attitude towards attending the CTYI classes. Interestingly many focused on the social aspect as part of the reason for looking forward to attending.

"Without the social aspect, it sounds like a Gaeltacht but with friends which is what brought me here the social aspect makes the academic side more enjoyable." S8
"I'm looking forward to it before I come. I like to think of it as a social thing and the classes are something I don't mind doing, I enjoy doing them." S7
"This year in particular I was so excited to come back as this is my last year. But I've always been really excited about attending because you make loads of friends from all over the place." S11

Other students seemed to stress the academic nature of the course.

"So positive. I've always wanted to go to all my classes particularly psychology." S10
"I look forward to the classes. You are treated as a student rather than a kid." S12

All of the students stressed that they hoped to achieve things both academically and socially by attending the course. From an academic perspective it mostly concerned getting an insight into college life and what they might study later.

"In general it gives you such a good opinion of the topic and an insight for what you would like to do in college." S10
"This course will have given me a good idea about what I want to do at college. After doing these courses I know that law is something I would want to do." S11
"An idea of what I'd like to take up in college." S8

From a social perspective it concerned making new friends and improving self confidence.

"Socially I would like to make friends but also make sure that no feels left out of anything." S8
"When I first came I was very quiet but what happened over time, that I didn't think would happen, is that I became a lot more confident thanks to the course." S9
"I've made a lot of friends here already and I'd like to be able to hang on to them. It's good because you get to meet people form all over the country and America. It's a really good way to meet new people." S11

Theme 2: Level of Academic Satisfaction and Challenge at CTYI

All of the secondary students said they were academically satisfied with the classes stressing the college like environment as a factor in this. Also the fact that more discussion is possible due to the longer time spent on topics added to the level of details that the students could get into in their chosen subject.

"The way it is taught. Being taught by lecturers who have just done a masters degree. They are younger than most school teachers and teach as though they were a college lecturer. It suits the way I learn." S9
"They're interesting, fun and interactive. You can really participate and discuss within them. You can make your point or have your say without being judged on it." S7
"I like the dynamic within the class. There are strong personalities but also people who wouldn't be very outspoken but have good things to say. The discussion in the class is brilliant. Everybody gets to give an opinion." S10
"I like the way they're more lecture based. They're also more open to discussion which is better than school." S12

All of the secondary school students said they felt a level of academic challenge and most of these attributed this to the college level nature of the courses and the research involved. Many compared this to what they experienced in school.

"The reading is quite tough because it's college level reading. And because it's legal reading there are a lot of terms you mightn't have encountered before. You also have to think differently than for schoolwork." S11

"The classes here offer more detail. In school it's much broader but here taking an aspect in detail is challenging and makes it far more interesting." S8

"Yes, the first course I did was philosophy and that blew my mind compared to what I'd been doing in school. It was great." S9

"We're doing a lot of scientific experiments and we've gone to the library twice to do our own research which is a first for us." S10

"There are things you never get to experience in school such as human rights law. There is more discussion, more thinking and a more interactive atmosphere than in normal schools." S12

Theme 3: Attitude and Academic Challenge at School

Four of the six secondary school students had a positive attitude towards attending school.

"I love school. I really enjoy it." S7

"I'm positive towards school. I do well in school, I study so it's a lot easier for me." S10

Others felt school was something as a means to an end.

"I have to attend school. I've set goal of 600 points for myself so I have to attend to achieve that." S9

"School in general can be a bit tiring. It depends on the classes. I'd call my attitude indifferent. By the end of the year it's moving towards "just let it end"." S8

Most of the students felt that school was not that challenging in some subjects.

"In some classes it's challenging. I find Maths challenging, English not so much. It's more Maths and Sciences that I find challenging." S12

"The only subject in school I find I have to work at is Maths." S10

"I'm more challenged in the Leaving Cert than the Junior Cert but no so much that I'm suddenly madly interested in class." S9

Theme 4: Ranking and Ability at School in relation to Peers.

Maths and English were listed as the favourite subjects for secondary school students with one student choosing Economics and another picking Business. Most of the students felts that with the secondary school system they had enough time to study their various individual favourite subjects.

"Well English and Maths are both heavy-loaded on the study side in terms of quotes and formulas. They both require a lot of study and a lot of outside knowledge to get the full marks." S8

"I like the balance as well because I tend to like all the subjects."

Others felt frustrated at the lack of choice and variety.

"Because of the choice system I couldn't do all the subjects I wanted to for the Leaving Cert so I ended up doing Classical Studies instead of Technical Graphics. I would have preferred to do Tech Graphics rather than another English based subject." S9

"Last year we only got to do modules of those classes that I liked" S12

"It would be nice to have more English." S11

Most of the students would rank themselves as better than their peers in subjects that they believed they were good at but not in all of them.

"I'd say I'm probably better than most people at certain subjects because mainly the subjects that I really like are influenced by the fact that I'm good at them. They would be my best subjects as well as my favourite subjects." S7

"In English I'd say I'm probably better than the average person, same with geography." S12

"In English I'd be top of the class a lot." S11

"I've a bit of a reputation for being the best guy in the year at maths subjects. I wouldn't be the most intelligent overall but definitely in the maths subjects." S9

This is qualified when it comes to other subjects.

"Irish- I'm doing ordinary level and in French I'm struggling with higher level." S8

"I'd probably be worse than a lot of people in Irish, I struggle with it." S11

"There are people better than me in science. My weakness is probably languages." S12

"Ranking myself in other subjects. Probably somewhere between "better than" and the "same as". There aren't any subjects that I'm bad at, just not as good as my best." S7

All of the students said they liked and sometimes participated in sports but none would consider that they excel in it. Some saw themselves as slightly above average, others felt that they were the same and some felt they were a little below average.

"I'm probably the same as most people." S7

"I'm not against competitive sports, I used to play rugby for three years but I'd rather take up sports like archery, more hobby based." S8

"A little below average." S9

"I play hockey and I'm ok at running but I wouldn't be the best at sports at all. Probably the lower end of middle." S11

Theme 5: Comfort with Ability and Comfort with term Gifted

All of the students had heard of the term giftedness to describe ability. Many likened it an innate talent but did not see it confined to academia.

"To be born with just a natural talent. Quick to understand new things." S8

"To be gifted means having an higher IQ or something like that but a better ability for learning as opposed to other people. I prefer to think of it more like a talent, the way sport is a talent." S9

"Something you have a talent for, not necessarily academia but just something you have a flare for." S7

"I think gifted means that you excel in something. It might be academically, intellectually or artistically." S11

Using their own definition criteria four of the six students described themselves as academically gifted.

"I'd like to think so. I've got my strengths and my weaknesses." S12

"Being at CTYI means that we're gifted academically, so to speak." S10

Two students though had different understanding of the term gifted and didn't feel they matched the criteria. One believed the term applied to those who were operating at a much higher level and the other believed the term could not be applied to someone who just did well at school but rather it was something with which you were born.

"I'd say I'm lucky with everything. I do well but I wouldn't say I'm gifted. I would usually think of gifted as someone who is talented at music or art or singing or something like that. Or they're an absolute genius." S11

"I wouldn't call myself gifted, just more strongly educated. Giftedness is something innate" S9

Most of the students said they are comfortable or fairly comfortable with their ability.

"Fairly comfortable. It can be a bit awkward sometimes, when people ask you "how do you know that?" S11

"In most subjects I am comfortable." S12

"I am comfortable with my ability because I feel that I can help other people." S10

However some students qualified this in an academic context and believed because of their ability they should be doing well in everything. One student still felt that he needed the teacher's approval for his ideas.

"I'm not very ambitious when it comes to studying for school. If I put in more effort I'd be better at Irish and French for example." S8

"I went for grinds in Irish last year but still didn't do to well in that subject for the Junior Cert." S12

"If I go to write something on the board I look to see if the instructor approves. I'm still slightly unsure of the way my thought process works." S9

In summary all of the students expressed a positive attitude towards attending CTYI.

Unlike the primary school students the secondary group stressed the social side of the

programme as a reason for attending as well as the academic side. Overall the students were academically satisfied at CTYI and believed this was because of the college like environment and the higher academic challenge of the courses. While most of the students had a positive attitude towards school some saw it as a means of getting the necessary points for getting them to university. Others noted the lack of challenge in some subjects and reasoned that attending CTYI filled this gap. As with the primary students the secondary group ranked themselves higher in subjects that they were good at but not in others. They seemed particularly hard on themselves in subjects where they were not excelling. They viewed giftedness as an innate ability and perceived themselves as academically gifted which was somewhat different in their eyes to other forms of giftedness. They weren't as comfortable with their ability as the primary students and saw negative aspects of having high ability as well as positive ones.

Group 4: Secondary school parents.

Theme 1: Attitude towards attending CTYI and Why they Attend.

All of the parents involved said that their children generally had a positive attitude to attending CTYI. Two said that they had slight apprehension at first. Another said that their child needed to find out what people they knew were going before they were happy.

"I think she was a bit apprehensive the first time but from day one she was delighted and looked forward to the second one even more." P12
"Each year it was his decision to do it. He always looked forward to it especially after doing the CTYI for primary schools." P11
"The most important thing after the first year is not the subjects on offer but who else is going to the programme." P10
"She was very enthusiastic to attend. Her attitude was very positive and after she looked at the website she was sure she wanted to attend." P7

There were different themes that came up in relation to what the parents hoped the child might achieve by attending the programme. Two felt that it was useful to give them a chance to see the subjects they might be studying in college.

"The various courses he did would give him a flavour of college academia." P11
"I think the courses she did are the ones that would appeal to her after she leaves school." P12

Three of the parents hoped it would make them more comfortable with their ability and what their child could do with this ability.

"Motivation and confidence. He has always had a lot of friends but what he needs here is motivation." P10
"We wanted him to realise where he stood in life. In his own school he was a big fish in a small pond but tended to hide his ability by lowering his standards. I felt coming here would show him the higher standards other people set for themselves." P8
"Spending a lot of time with other people her age and becoming independent and self motivated. Something like this will allow her to show her creative side." P7

Theme 2: Level of Academic Satisfaction and Challenge at CTYI

All of the parents said that their children had a level of academic satisfaction with the classes although two qualified that by saying that this was not as important to the child as their social satisfaction.

"Yes he is satisfied. He likes learning new subjects." P8
"She likes the discussion based aspect of the classes." P7
"I think she is satisfied but she mostly talks about the social life on the course and how happy she is with that." P9
"I can see that he likes the classes which is not too surprising because he always chooses subjects that he is interested in but he definitely prefers being away from home and meeting up with his friends." P11

All of the parents said that the children had a level of academic challenge from attending the classes.

"The standard and pace of the class is far higher. The subjects themselves are more interesting. The standard of his peers was so high it definitely challenged him." P11
"She directed a play for one of the drama classes without any previous experience of doing that. She has done drama for 3 years outside of CTYI now but I was still surprised she undertook the challenge of directing the play." P7
"She never said she found it difficult but the level of challenge is above what she'd normally be used to." P12

Theme 3: Attitude and Academic Challenge at School

Two of the parents said that their children had a very positive attitude towards school in general. One said that now that they had reached fifth year the attitude would be more positive.

"She gets bored in school but she is adamant that she will not have a problem when she goes back in fifth year as she will have an objective." P9

Other parents were more negative about their child's attitude towards attending school.

"The transition year was terrible as he had nothing to do. He wished he'd skipped straight to fifth year." P11
"He had contempt for the school, the teachers and the pupils. He felt that he was there to learn and if they weren't teaching him properly then they should be fired." P8
"He loved school up until this year. This year was his transition year and has been difficult." P10

Most of the parents believed that their child was not academically challenged at school. A lot of parents believed their children got by without putting in too much effort or extending themselves.

"He loves a challenge but ultimately most things aren't too challenging for him." P10
"She felt that if she'd have been challenged more in the class it would have made her work harder." P7
"Sam takes everything in his stride but still he gets awards every year for his work without putting in too much of an effort." P8
"She didn't push herself to hard while still doing well." P12

Theme 4: Ranking and Ability at School in relation to Peers.

The parents seemed to think their children were good across a range of subjects. Maths and English were perceived as the favourite subject for four parents with three choosing science as well. Generally though they seemed to think their child's ability covered a range of subjects.

"He seems to be equally good in Maths and English. He surprised me with how well he did in the Science subjects." P8
"English, History and he loves French. He would also be good at Maths." P10
"He's good at them all. He loves Irish and is very good at it. English too. Maths he felt he wasn't too good but he's doing alright. He finds Geography very easy. I think he likes all his subjects." P11
"She loves History and English. She loves writing and poetry. She would write stuff herself and had done since she was very young." P9

Three of the parents said that they believed their child would be ranked at the top of their class in all subjects.

"Yes. He would have been the best in his class at everything." P11
"She would be at the top in most subjects." P12
"He would be better than his school peers, yeah. I worry he seems to be head and shoulders above his friends. Another reason for sending him to CTYI was so he wouldn't judge himself by their standards." P8

Two said that they would rank well in subjects that they were good at but not so highly in others.

"In English he is probably top of the class and he reckons that he is number one in the year. He'd be way ahead of people in French and History. He did very well in his history project. His Maths is not above average. It's about average at the moment." P10
"She wouldn't be the best at maths. She tried to change to a more challenging class but didn't do well enough in the exam. She gets B's in maths whereas science she always gets A's." P7

Four of the parents said their children participated in sports but most said that this was as a hobby rather than competitively.

"She's not very athletic but she is part of a soccer team. It's mostly for the social aspect with her friends." P7
"He was a nifty hockey player when he kept that up. He's no good at rugby but would still put on the jersey and go out and play." P10

Theme 5: Comfort with Ability and Comfort with Term Gifted

Most of the parents said they were comfortable or somewhat comfortable with their child's ability.

"Yes, I would have expected that she would get on the course here. I'm glad she did as I feel it has opened her eyes as to what she can do." P12
"I think he's very lucky in the sense that he's pretty bright and has social graces. He's pretty balanced and has a good insight into things." P10
"It took a while to get used to I have to say. I suppose that first time he was assessed and his scores were so high it shocked me a little. For the Junior Cert I realised that my way of studying wasn't the only effective way for him. He could literally just glance at it and know it instantly." P11
"Yeah, I would have been very no nonsense about her ability. She wouldn't have been given any preferential treatment. I knew she was clever from an early age though." P9

Most of the parents understanding of the term gifted had negative connotations towards the term.

"I do hear the term a lot and I feel sorry for the ones who don't have the social skills to go along with the academic skills. It has kind of a negative stereotype attached to it." P12
"I would always have considered gifted to be a child prodigy." P9

"I think it's a very loaded term and I don't like it. There are things that make me shy away from the term gifted because you can be gifted in different ways. I think that there is a burden put on these kids because it's like you're so gifted the world had to make special accommodation for you." P10

"It's kind of an embarrassing term in a way. All children are gifted in so many ways so it's not a term I'm terribly comfortable with." P11

Three of the parents described their children as academically gifted.

"I knew from when he was two that he was highly gifted. I knew he was going to be bored in school." P11

"With her, she will tackle problems or face challenges head on. She won't feel defeated because something is difficult." P7

The other three parents didn't believe their children met the criteria.

"I don't think she's gifted. She's naturally intelligent but she needs to apply herself in order to do well." P9

"No, I don't really. I think she's bright but I wouldn't ever say to someone that she was gifted." P12

Overall the parents think their children have a positive attitude towards CTYI. Some mentioned that they were apprehensive at first but once they settled, they looked forward hugely to the programme. Academically the parents believed their children were very satisfied although a couple of parents stressed that the social satisfaction was more important for the child. The secondary parents noted a more negative attitude towards attending school particularly for those in transition year. They also felt that their child was not challenged sufficiently at school. They ranked their child as best in subjects they were good at but differed from the primary school in that some of them did not rank them as best across the board. Most of the parents were comfortable with their child's ability but had negative connotations with the term gifted to describe that ability.

Summary of Interview Findings

On the whole the interviews reinforce the information from the questionnaire data. All of the students and parents report a positive attitude towards attending CTYI. The secondary students seemed to stress the social side of the programme more than the primary school students. Most of the students said that they had a somewhat positive attitude towards attending school but qualified this by saying that they often felt a lack

of academic challenge. The parents also reported a positive attitude towards attending CTYI but many reported more negative feelings about their child's attitude towards attending school.

All of the parents and students reported a high level of academic satisfaction with the classes at CTYI. The secondary students stressed the college like subjects and the opportunity to study a subject in more depth as the most appealing part of the course. The primary parents noted that the higher level of academic challenge compared to school and considered this a good thing.

Similarly to the questionnaire data the parents did rank their students better in some subjects than the students did themselves. The students seemed willing to perceive themselves as much better than their peers in areas in which they considered themselves good but the parents seemed to consider this as all academic subjects. The students at primary school seemed to like Physical Education and considered themselves good at this area but many of the primary parents seemed to think that they weren't good at sports. The secondary school students seemed to like sports as an extra curricular activity and the parents answers were similar in this context.

The primary students didn't really have an understanding of the term gifted so didn't see any negative connotations. The primary parents were aware of the term and most were happy to describe their child as gifted. The secondary school students had different ideas and definitions for the term giftedness. Using their own definitions which mostly described a subject specific ability in an academic context, a majority of them described themselves as gifted. Some of the secondary school parents saw the

term gifted as quite a negative stereotype. Half of them saw their children as gifted while the other half did not. These interviews will be analysed in more detail and in the context of the whole research in the next chapter.

Conclusion

This chapter has detailed the results of the five pieces of research that were undertaken in this study. From the questionnaire data we have seen that both primary and secondary school high ability students and their parents seem to be more satisfied academically with classes at CTYI compared to school and that they have a more positive attitude towards attending CTYI than school. The research has shown that parents rank their child's ability higher than the children themselves in academic subjects. Both primary and secondary students believe they get the highest level of encouragement for their ability from their parents. The parents and the students feel that they get little encouragement from their classmates in relation to their ability. Most of the primary and secondary students are comfortable with their academic ability. Primary and secondary school parents are more comfortable with their child's ability than the students themselves. Secondary school students are slightly more uncomfortable with their ability than primary school students. Primary school students also seem more comfortable than their secondary counterparts with the term gifted to describe their ability and with describing themselves as gifted.

Secondary school CTYI students show a much higher preference for Intuitive (N) thinking on the Myers-Briggs Type Indicator than non gifted students. Using this measure there is also a higher proportion of Introverted (I) thinkers at CTYI than in a regular school where there will notably have a higher proportion of Extraverts (E).

Most high ability secondary school students from this study have self concept scores within the average range using the Piers Harris Children's Self Concept scale although there are differences among males and females in this sample. Compared to non gifted students most participants in this study have a higher academic self concept but a lower social self concept in certain areas. The qualitative interviews reinforce the results from the questionnaire in relation to levels of academic satisfaction and attitude towards attending CTYI and school. All primary and secondary students and parent groups believed that they experienced greater challenge at CTYI and sometimes felt frustrated at school. From these interviews it was clear that primary school students did not understand the term gifted as much as their secondary school counterparts who felt that it had something of a negative connotation. All of these results and findings will be further analysed and discussed in the next chapter.

Chapter 5:   Analysis

Introduction

This chapter will analyse the findings across the different pieces of research. The data will be discussed under the headings of the five major themes that emerged from the research. These themes were Attitude towards attending CTYI and Why they Attend; Level of Academic Satisfaction and Challenge at CTYI; Attitude and Academic Challenge at School; Ranking and Ability at School in relation to Peers; and Comfort with Ability and Comfort with term Gifted. The conclusion of this section will discuss the overall findings study as a whole and the implications for potential policy for gifted students in this country.

Theme 1: Attitude towards attending CTYI and Why they Attend

All the groups, including primary and secondary students and parents had a very positive attitude towards attending CTYI. This is consistent across the quantitative and qualitative data. Quantitatively it was noted that approximately 95% of primary school students and parents had a very positive or somewhat positive attitude towards attending CTYI. These figures are similar to the secondary school students where 96% have a positive attitude towards attending CTYI and 99% of parents believe their child has a positive attitude. These figures were compared with the students attitude towards attending school and the results using statistical testing (Wilcoxon Ranking Scale) showed that parents and students at both primary and secondary had a significantly more positive attitude towards attending CTYI than school. The MBTI that was administered to secondary school students might help us to explain why this occurs.

We noted from the previous chapter that four types predominate the overall CTYI student results. These are INFP, ENFP, INTP and ENTP. This is consistent with other studies in the area (Hawkins, 1997; Parker & Mills, 1998; Sak, 2004, Cross, Spears-Neumeister, & Cassady, 2009). These types may be more suited to classes at CTYI than regular school. Myers (1980) describes INTP's as students who have a need for classes that allow them to analyse concepts in depth and they have a need to question recognised ideas and practices. The fact that the subjects at CTYI are university courses and that CTYI allows students to study subjects at an advanced level services this need. Myers describes INFP's as students who have a very individual style. Because of their introverted nature most of their personality traits are internalised so they may not express themselves well in school. They find structures and rules somewhat confining and they tend to prefer classes where they are allowed freedom of expression including Creative Writing, and Drama. These are subjects that are more likely to be found at CTYI than school where the students are given more freedom to express their ideas.

The qualitative interviews further emphasises this point. In the interviews, all of the parents and all of the students reported a positive attitude towards attending CTYI. Some of the primary school students noted that their positive attitude came from having the opportunity to do subjects that weren't available at school like journalism or chemistry.

"I think that when I am in DCU, I have more freedom to express myself." S3
"I like coming here. You can't do journalism in my school." S6

The results from the Piers Harris Children's Self Concept Scale that was administered to the secondary school students can also help us to explain why the students have a

positive attitude towards attending CTYI. Results from the previous section showed that CTYI students have a higher Intellectual and School Status than regular students. This subscale of global self-concept reflects a child's assessment of his or her abilities in relation to intellectual and academic tasks. Children who score highly on this scale display confidence in their general intellectual abilities and in their performance on academic tasks. The idea that they are coming to a programme that would challenge their academic ability is therefore something that they look forward to and is reflected in the positive attitude towards attending.

From the questionnaires, all primary and secondary parents and students agree that the main reasons for attending the CTYI programme seem to be to learn new things, interest in the subject or if they had attended previously because they had enjoyed that experience. It was noted that there was more of an academic focus on attendance at primary school with a greater emphasis on social factors at secondary school. From the secondary school students questionnaire it was noted that 93% attended to make new friends compared to 58% of the primary school students. This result was explored further in the follow up qualitative interviews

During these interviews, the secondary students noted social reasons as being one of the main factors for attending the CTYI programme. This is consistent with previous findings from Enerson (1993) and Moon, Feldhusen & Dillon (1994).

"I like to think of it as a social thing and the classes are something I don't mind doing." S7
"The friends you make at CTYI are ones that you will keep for life." S10

The quantitative data showed that while nearly all of the parents and students displayed a positive attitude to attending CTYI, the primary parents perceived a significantly more positive attitude to the child attending CTYI than the child themselves. This was something I wished to explore in the interviews. Within these interviews primary school parents noted that CTYI was something that their children looked forward to and were anxious to attend on the day in question.

"Some days he's not all that enthusiastic to go to school but when it's time to come to DCU, he's up an hour early with his bag ready at the door." P2

During the interviews the secondary school parents also reported a positive attitude towards CTYI but some felt that the long annual gap between programmes represented an initial problem with attitude to attending. These findings are similar to those of VanTassel-Baska, Landau and Olszewski (1984).

"I think he forgot what CTYI was like. He initially would have preferred to hang out with his friends at home. Once he arrived and started sharing his scientific interests he enjoyed it." P8
"He felt this year that he may have been too old to attend as the people he often looked up to were gone but it wasn't the case as he had a fantastic year." P10

The qualitative data also threw up some new information that wasn't covered in the questionnaire. This was what the parents and students hoped that they might achieve by attending a CTYI programme. For the primary school students these aspirations were mostly academic.

"I want to do well in secondary school in my Junior and Leaving Cert." S4
"It would probably make chemistry easier in secondary school." S5

For the secondary school students some stressed academic achievements.

"In general it gives you such a good opinion of the topic and an insight for what you would like to do in college." S10
"This course will have given me a good idea about what I want to do at college. After doing these courses I know that law is something I would want to do." S11

Others stressed the social aspect. This is the continuation of a theme that runs through this research. Secondary school students place great value on the social benefits of attending CTYI.

"Socially I would like to make friends but also make sure that no feels left out of anything." S8
"When I first came I was very quiet but what happened over time, that I didn't think would happen, is that I became a lot more confident thanks to the course." S9

Most of the primary parents believed their child attended to learn something new

"He wants to learn something new and gain more knowledge. He loves facts and figures." P6

Some of the secondary parents emphasised academic reasons

"The various courses he did would give him a flavour of college academia." P11
"I think the courses she did are the ones that would appeal to her after she leaves school." P12

Others wanted their child to become more comfortable with their ability.

"Motivation and confidence. He has always had a lot of friends but what he needs here is motivation." P10
"Spending a lot of time with other people her age and becoming independent and self motivated. Something like this will allow her to show her creative side." P7

This section shows that overall parents and students have a positive attitude towards attending CTYI. It was found that the reasons for attending are mostly academic at primary and while these still apply at secondary school, social factors play a more significant role in contributing to why these children attend. This finding is also evident in what these students hope to achieve by attending the course. Again the primary students aspirations are mostly academic while the secondary students also note social achievements as being important. The primary parents seems to want their child to experience something new while the secondary parents believe academic factors are important in why their child attends as perhaps they are conscious of the fact that the students will be sitting exams soon and will have to make decisions about

future college courses and careers. Significantly though some of the secondary parents hoped that becoming more comfortable with their ability and increasing their self confidence was something they would achieve. The theme of comfort with ability and giftedness is general runs through this piece of work and is explored in detail later in this section.

Theme 2: Level of Academic Satisfaction and Challenge at CTYI

There is a consistent finding across the quantitative and qualitative data that all the groups, primary and secondary, students and parents have a high level of academic satisfaction with classes at CTYI. From the quantitative data, at primary school roughly 60% of students and parents are very satisfied with classes at CTYI and 35% are quite satisfied. At secondary school these results are even more positive from the parents perspective with 82% of parents very satisfied academically with the classes at CTYI and 63% of students very satisfied.

Comparing these results statistically (Wilcoxon Ranking Test) with levels of academic satisfaction with school shows that parents and students from both groups significantly rate the level of academic challenge higher at CTYI and report a significantly higher level of academic satisfaction with CTYI compared to school. The MBTI can help us to explain this again.

We have seen that the four most common types in the CTYI group are INTP, INFP, ENTP and ENFP. Common within these types are NT (intuitive thinkers) and NF (intuitive feeling). Myers (1980) defines combinations of types. For example, she describes those that possess intuition plus feeling (NF) as individuals tending to focus on new possibilities and new projects. Often they have a gift of language that they can

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use to communicate to a high level. Also, she describes those that possess intuition plus thinking (NT). These tend to be ingenious and successful in solving problems of a special interest citing mathematical, scientific and computing research as examples. These individuals are ideally suited to the work of CTYI taking specific courses for a three week period working on projects and delving deeper into aspects of the programme that appeal to them.

We have also seen that CTYI students have a large preference for Intuition (N) over Sensing (S) on the individual subscales of type. Myers & McCauley (1985) describe those that prefer Intuition (N) as students who prefer to look at new ways of doing thing by trying to connect previously unrelated events. Their thoughts tend to be of an abstract rather than a concrete nature and prefer to look at the bigger picture or wider scheme of things. They enjoy the theory behind concepts and see patterns and new meanings in facts. Typically, they are creative and will set their mind to many tasks at any given time. Those who prefer Sensing (S) focus on the world as they perceive it through their five senses. They are observant of the world around them and are good at recognising the practical realities of a situation. They tend to be focused towards the present moment and rely on immediate experience. They prefer facts and value working in practical applications. They prefer step by step information and enjoy remembering things sequentially. They make literal interpretations and focus on concrete problems. In school most of the learning traditionally is geared towards those who prefer Sensing (S) with little emphasis on Intuition (N). At the CTYI classes there is more of an emphasis on creativity and learning through theory so high ability students who favour Intuition (N) will be better served.

The qualitative data also supports these findings. All of the primary and secondary students reported a level of academic satisfaction with the courses at CTYI. I was interested in finding out why they believed this was the case. The secondary students interviewed seemed to attribute this to the college like nature of the courses. As one secondary school student put it

"You are treated as a student rather than a kid" S12

They felt that the structure of the classes was more suited to a college lecture than a class at school.

"Being taught by lecturers who have just done a masters degree. They are younger than most school teachers and teach as though they were a college lecturer. It suits the way I learn." P9

These results are consistent with findings from Enerson (1993) and Kolloff and Moore (1989).

The primary school students' satisfaction seemed more geared towards the exposure to new subjects. One student noted that they didn't do Journalism at school and another said that they didn't get to do experiments at school like they did at courses such as Chemistry that they were studying at CTYI. The college structure of the courses also contributed largely to the level of academic challenge felt by the secondary school students. One student noted the "college level reading" that was needed on the course and another student noted that that the curriculum on Philosophy was far advanced compared to school. Previous research reported similar findings in this area. (See Adams-Byers, Whitsell & Moon, 2004; Feldhusen & Moon, 1992; Sayler & Brookshire, 1993; Moon & Roselli, 2000).

Some of the primary school students felt challenged but not to the same level as the secondary school students.

"Sometimes I am challenged at CTYI but sometimes not" S5

This could be attributed to the fact that the primary school programme at CTYI is geared towards introducing students to new topics. This is done in a fun and practical way rather than exposing the students to difficult readings or to topics that would require a higher level of learning. Most of the primary school parents felt that their children were being challenged in the classes.

"She's definitely finding it more challenging than school." P4
 "I think academically he's finding it difficult in so far as it's a challenge, and that's good for him." P2

All of the parents of the secondary school students believed that their child was more academically challenged at CTYI compared to school. One noted that the greater challenge at CTYI could be attributed to the higher standard of their peers on the high ability programme. Another noted that the challenge could be attributed to the pace of the class and the more diverse subject matter. These positive effects are consistent with previous studies by Olswekski-Kubilius & Lee (2004) and Moon and Feldhusen (1994).

Theme 3: Attitude and Academic Challenge at School

The quantitative and qualitative data produced some interesting results from this theme. Examining the quantitative data first we see that while 49% of primary parents said their child had a very positive attitude towards attending school, only 25% of the primary parents said they were very satisfied academically with their child's schooling. The results are very similar for secondary school parents with 51% saying their child had a very positive attitude towards school and only 23% saying they were

very satisfied academically with their child's school. The students themselves are not as positive as the parents about their feelings towards attending school with 38% of primary students reporting a very positive attitude and 33% of secondary students stating they had a very positive attitude towards school.

This lower score can be explained by the fact that the students often perceive a lack of academic challenge at school. Only 17% of the secondary students said they were very satisfied academically with classes at school. This compares to 63% who said they were very satisfied with classes at CTYI. Similarly 31% of primary students reported that they were satisfied academically at school compared to 61% who reported that they were very satisfied at CTYI.

The quantitative data reinforced this point from the students perspective. Most of the primary and secondary school students had a generally positive attitude towards attending school while also experiencing some lack of academic challenge. For the primary school students they seemed to be happy at school while for the secondary students they enjoyed doing well at school.

"I'm positive towards school. I do well in school, I study so it's a lot easier for me." S10

Most of the primary and secondary students noted a lack of challenge in the subjects at school. Baker, Bridges, & Evans (1998) found that high ability students can often experience a lack of academic challenge in regular classes. In many cases the students found school a little easy.

"Yeah, it's fine. Sometimes the lessons are a bit tiring because some of the books are really out of date – my friend's mum used one of our books." S5
"School is ridiculously easy whereas CTYI is challenging." S9

The secondary school students also saw schools as a means of getting in to their chosen course in college. One student mentioned that the reason he attended school was to achieve 600 points in his Leaving Certificate that he needed for college entry.

The results from the questionnaire data indicated that the primary students were statistically more satisfied with school than the primary parents. This theme came up again during the interviews. The parents of both groups on the whole believed their children were more dissatisfied with school particularly at primary school. Three of the six primary school parents reported negative attitudes towards attending school. Some said that while they had started off liking school they had recently began to feel frustrated. Most of the primary school parents reported that their children had a level of academic dissatisfaction with school. Some would report that they find school easy or that "they breeze through school." Others would be unconvinced about the level of challenge even if the child said it was difficult.

"He says he finds maths hard, but when he gets a worksheet he just flies through it and I don't think he's challenged sufficiently in school." P2

Three of the secondary school parents reported negative attitudes in their children towards attending school. Like the primary school parents they believed that their child had started enthusiastically enough in secondary but had switched off as they went through the system.

"The transition year was terrible as he had nothing to do. He wished he'd skipped straight to fifth year. He just got so lazy. He found first to third year very easy." P11

Most of the parents felt that that the challenge at school was not sufficient for the child's ability. They believed that particularly up to Junior Certificate their child could do well without putting in too much effort. Two parents believed their children

got angry with their teachers because they did not rate the quality of the teaching and the challenge of the curriculum.

From an extensive review of the Myers-Briggs literature, Hoffman and Batkouski (1981) studied teachers at all levels, from pre-school up to college, using the MBTI. The majority of teachers in each sample showed a preference for extroversion over introversion, sensing over intuition, feeling over thinking, and judging over perception. They conclude that the modal MBTI type for teachers from this review would be ESFJ. This type is described by Myers (1980) as radiating warmth and fellowship. They are warm-hearted practical, realistic people that adapt excellently to routine but have little interest in abstract thinking. Good teaching styles for instructors of the academically talented tend to be intuitive-thinking and intuitive-feeling, as opposed to sensing thinking and sensing feeling (Howell and Bressler, 1988). Intuitive-thinking teachers are those whose style reflects intellectual orientation and whose plans for teaching are developed around concepts, open-ended questions, critical thinking, logical research techniques, and independent study. Intuitive-feeling teachers are those whose style reflects innovative orientation. They place a high value on insight and innovative ideas, creative thinking and moral development. A flexible, imaginative approach to learning and a classroom environment full of creative clutter best describes the intuitive-feeling teacher. Based on the modal teaching type at school this scenario will not occur. ESFJ's will present a school environment that is both predictable and traditional and this might explain the high level of academic dissatisfaction with school from high ability students and parents.

The questionnaire data indicated that the parents at primary and secondary perceived a more positive attitude towards attending school than the students themselves. The Piers Harris data may help us to understand this. The scores for the Piers Harris scale for the gifted group compared to regular students showed a significantly lower self concept for gifted students in the subscale of Popularity (POP). This subscale measures the child's ability to make friends and feel included in activities. In this case the gifted students may be experiencing social difficulties at school and therefore may not have a positive attitude towards attending.

Two of the parents noted that their children were more focused in subjects in which they were interested. Most parents recognised that the child would benefit from extra stimulation in subjects in which they excelled and that this was where they benefited from CTYI. As one parent noted.

"In maths at school when she finishes ahead of the other students she tends to daydream which causes a loss in focus within the class. She felt that if she'd have been challenged more in the class it would have made her work harder." P10

Most of the primary school students felt that they didn't get enough time to study their favourite subject at school. Primary school parents too feel that their child does not get to study enough of their favourite subject at school.

"We don't do lots of Maths at school and it's too simple" S2
"Her teachers realised that she was gifted but she was never involved in a reading group or anything. She was just left to do her own thing" P1

The secondary school students felt that the more specific timetabling of subjects at secondary school enabled them to do enough of their favourite subject. However they believed that the opportunity to do a new subject or to study their favourite subject at a higher level was one of the main reasons for attending CTYI.

"It's such a good opportunity to get to know subjects. I did speech therapy a few years ago and decided for me what I want to do in college." S10

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"I've always been interested in writing so to come to DCU to study Novel Writing was a great opportunity." S12.

The secondary school parents also stressed that it was the opportunity to study a subject in more depth than at school was a main incentive for their child attending CTYI.

"It's the idea of focusing in on something and devouring it in one chunk. Here it's intense and he can get into it quickly and immerse himself in it." P10

Theme 4: Ranking and Ability at School in relation to Peers

From the primary school questionnaire data we found that the majority of parents ranked their children and students ranked themselves as better than their peers at English, Maths and Science. Some 71% of parents ranked their children as much better at English compared to 67% at Science and 65% at Maths. The primary students showed similar results but the students didn't rank themselves as highly as the parents did with 57% saying they were much better at Maths, compared to 54% at English and 50% at Science.

This data is backed up by the qualitative interviews where half of the primary school students chose Maths as their favourite subject at school while most of the secondary school students chose Maths and English as their favourite subjects. Maths and English were the subjects chosen by the parents of both primary and secondary students as being their children's favourite subject.

The secondary school questionnaire data replicates the primary school results. Some 62% of parents rank their children as much better than peers at English compared to 57% for Science and 53% for Maths. From the students perspective 50% of them

ranked themselves as much better than their peers at English compared to 43% at Science and 42% at Maths. This shows that the trend from primary school where the parent ranks the child higher than the student ranks themselves continues at secondary school. Running some statistical tests on this data it was found that both primary and secondary parents significantly ($p \leq \cdot 001$) rank their children higher than the students do themselves. An explanation for this could be found within the qualitative data.

Within these interviews, all of the primary and secondary school students ranked themselves as much better than their peers at school in subjects that they felt they were good at but not as highly in subjects that they didn't feel were their strong ones. In most cases though the parents didn't make this distinction and ranked them as much better in all subjects. The primary school students seemed more comfortable ranking themselves as first in the class for a particular subject or in the top three. The secondary students seemed uncomfortable to rank themselves as top of the class preferring to say they were in the top stream or that others might think of them as the best. This is tied in to comfort with ability where we find that secondary school students are not as comfortable with their ability as the primary school students and this is discussed in the next section

"I'd rank myself as an 8 out of 10. My school is streamed so I would be in the top class for maths." S8
"I've a bit of a reputation for being the best guy in the year at maths subjects. I wouldn't be the most intelligent overall though" S9

The primary school students would be quite hard on themselves in relation to subjects that they did not think they were good at in relation to their peers at school. Three of these students ranked themselves in "the middle" in these subjects. The secondary school students also lacked confidence in subjects that they didn't perceive

themselves to be good at relative to their peers at school. One ranked himself as about "3 or 4 out of ten." Another talked of a weakness in languages and another stated "I'd probably be a lot worse than people at Irish" S11

This could be explained by Marsh and Hau (2004) who proposed that academic self-perceptions of ability are formed in connection with two frames of reference, which include external and internal frames. The external frame of reference is used by students to compare their self-perceptions of academic performance with the perceived performances of other students. If they perceive that their academic abilities allow them to achieve the same scores as other high achieving students, then they should have a high self-perception of academic ability. If they don't then they will have a lower perception of this ability. Other students in this study compare their academic performance in one subject with their own academic performance in other subjects, in this case they are using an internal frame of reference. As one students notes,

"My best subject is Maths and I'm good at that but in Irish- I'm doing ordinary level and in French I'm struggling with higher level." S9

The students may also be underestimating their ability because of a perceived lack of encouragement from classmates. The questionnaire data revealed that 56% of primary school students and 53% of secondary school students believed they received little or no support from their classmates at school in relation to their ability. Against these perceptions it could be argued that the students may be underestimating their ability relative to their classmates as they don't feel comfortable with being much better than their peers at school.

From the interviews the parents view in relation to ranking of their child's ability relative to their peers at school differed considerably to the children's views at both primary and secondary school. Differences occurred where most of the students ranked themselves in the top three in those subjects that they considered themselves to be good at while most of the parents described their children as the best in these subjects. One of the main differences in how parents ranked their children came in subjects other than ones where the child had excelled. Most of the parents ranked their child as much better than their peers in these subjects as well. Most of the secondary school parents displayed similar results to the primary school parents ranking their children as much better than their peers in all subjects.

"She would be top in most subjects." P12.

The main differences in terms of ranking of ability within the questionnaire data came with Physical Education. There was a complete reversal of the academic trend where in this case both primary and secondary students significantly (p≤·001) ranked themselves as better in Physical Education than the parents rated them. This was further explored in the interviews where three of the six primary school parents did not consider their children to be sporty, in one instance they saw this as a different perception than what the children believed themselves.

"She likes sports but she's not very sporty. She doesn't realise that but she's not sporty." P3

The primary school students though all believed that they liked sports. Three of the six students rated themselves as much better than their peers at sports while the remaining three said they participated in sports but would see themselves mostly on a par with their peers. This contrasted with four of the primary school parents who would perceive them to be much worse than their peers at sport.

It is worth noting though from the questionnaire data that while the primary and secondary students significantly perceived themselves to be better at Physical Education than their parents did, they still ranked themselves considerably lower than in academic areas with only 17% of primary and 16% of secondary students ranking themselves as much better than peers compared to 50-60% that would rank themselves as much better than their peers in academic areas. This is probably not a surprising finding given that the students were identified academically.

Within the interviews, the secondary school students said were all interested in participating in some sports but most did not see that they had great ability in this area. Some ranked themselves as being the same as their peers in sports and others as being slightly below average. The parents of the secondary school students saw sport as something that their child participated in as a hobby rather than something more seriously.

Theme 5: Comfort with Ability and Comfort with term Gifted.

From the questionnaire data we see that 70% of the primary school parents and 65% of the primary school students describe themselves as very comfortable with their academic ability. If we compare this to the secondary school data we see that 82% of parents and only 55% of students describe themselves as very comfortable with their academic ability. Using statistical testing we see that the primary school students are significantly more comfortable with their ability than the secondary school students

This drop in comfort with ability was something that I wanted to explore during the interviews. All of the primary school and half secondary school students interviewed

were very comfortable or somewhat comfortable with their ability. This is consistent with the research from the previous section with the students scoring significantly higher on the Intellectual and School status measure of self-concept within the Piers-Harris Children's Self Concept scale than their non gifted peers. The primary students seemed more comfortable and none of them listed negative traits associated with their ability. The secondary students were somewhat comfortable with their ability and saw the benefits of it but some stated some negative aspects of it.

"Fairly comfortable. It can be a bit awkward sometimes, when people ask you "how do you know that?" S11

Others stated that because of their ability they thought that they should be doing well at most subjects and were sometimes frustrated when this wasn't the case.

"I'm not very ambitious when it comes to studying for school. If I put in more effort I'd be better at Irish and French for example." S8

One secondary student explained that he didn't feel completely comfortable with his ability

"If I go to write something on the board, I look to see if the instructor approves. I'm still slightly unsure of the way my thought process works."

I believe that these factors such as the need for approval from teachers, the fear of not being accepted from classmates and the idea that they have to be good at everything are the major contributing factors in the drop in comfort with ability for secondary school students. As was documented previously the questionnaire data showed that 53% of the secondary school students felt they received little or no encouragement from their classmates in relation to their ability so in this type of environment it's little wonder why some of them feel slightly uncomfortable about their ability.

Generally most of the parents of both primary and secondary school students felt they were comfortable with their child's ability. There seemed to be more assurance from

parents of secondary students in this respect as they were now more accustomed to it. As one secondary school parent said.

"It took a while to get used to I have to say. I suppose that the first time he was assessed and his scores were so high it shocked me a little." P11

This is further reflected in the questionnaire data where the secondary parents are significantly more comfortable with their child's ability than the primary parents. While the primary school parents were comfortable with their child's ability some felt the child themselves hadn't quite come to terms with it.

"She's getting there. She's not a confident young girl. Every year she gets more confident." P3

From the interviews half of the primary school students said they preferred working on their own in school while the other half said they preferred working in groups. The ones that preferred working in groups saw the value of working with their friends while the ones who preferred working on their own said they preferred working in a quieter environment. Most of the primary school parents though believed that their children preferred working on their own. These parents felt that the children either ended up doing all the work in a group or that they wanted the group work to be done in their own particular way.

From the secondary school questionnaires it was noted that only 20% of parents and 19% of students were very comfortable with the term gifted to describe their ability. Within the primary school data the parents concurred with the secondary school results with only 17% saying they were very comfortable with the term gifted to describe their ability. However some 38% of primary school students described themselves as very comfortable with the term gifted to describe their ability with a

further 29% quite comfortable with this term. This was something that I was very interested in examining at the interview stage.

From the interviews I found that all of the primary school children except one had not heard of the terms gifted or giftedness to describe ability. They seemed unfamiliar with what it meant so this may explain why this figure is higher compared to the secondary school students where 15% of students are very uncomfortable with the term gifted to describe their ability and a further 29% are slightly uncomfortable. The one primary student who had heard the term before related it to be being good at things and in that context believed himself to be gifted in the areas of Maths and English. Looking back to the literature in relation to giftedness this explanation falls into the definition of subject specific giftedness rather than giftedness as a global concept.

Within the interviews the secondary students had all heard of the terms gifted or giftedness to describe ability. They saw giftedness as an innate talent or ability that somebody has for something. Most of them did not see this as being confined to academia. This is an interesting point and defines giftedness more in terms of nature rather than the nurture theory of giftedness where giftedness here is being defined as an inherent ability rather than the environmental factors. This is a very traditional notion of giftedness and contrasts somewhat with the modern theories of Gardner and Sternberg.

There were mixed responses to the term gifted from the parents of the primary school children. Those that worked in an educational environment had heard the term before

and they were happy with it to describe people in an academic setting who had significantly higher ability than others. Parents from non educational backgrounds were less comfortable with the term. One felt it only described people of renowned ability with proven exceptional proficiency in a field like Einstein or Beethoven. Other felt that it had negative connotations for their child and that it was an elitist concept.

"It's not one I like in particular, because I think everyone's gifted in their own way. However, I don't know that there's really another word to describe somebody whose overall talents are at a certain level. I suppose it describes it very well but there's a label, a negative part with it." P5

Most of the secondary students felt that by being selected or qualifying to attend CTYI made them talented academically. Some believed that this made them gifted while others didn't think that this was the case and preferred to think of themselves as strong in academic areas which was a different thing to giftedness..

"Being at CTYI means that we're gifted academically, so to speak." S10
"I wouldn't call myself gifted, just more strongly educated. Giftedness is something innate" S9

From the quantitative data students and parents were asked if they would describe themselves as academically gifted. At primary school some 70% of parents and 68% of students described themselves as academically gifted. At secondary school the numbers had fallen to 61% of parents and only 44% of students describing themselves as academically gifted. We have noted earlier that many of the secondary school students are uncomfortable with the term gifted to describe their ability so it is probable that they uncomfortable in describing themselves as gifted as well. The Piers Harris Children's Self Concept Scores shows that the secondary students aged 15-16 years in this study had lower individual self-concept scores in areas of Popularity (POP) and Happiness and Satisfaction (HAP). Popularity (POP) measures the child's

perceived popularity while Happiness and Satisfaction (HAP) measures whether the students see themselves in a positive way. Given the potential negative stereotyping associated with the term gifted it is understandable how a large proportion of gifted students may not describe themselves as gifted.

Interestingly at the interviews students wanted to construct their own definition of giftedness. Using these definitions or specific criteria four of the six secondary students defined themselves as gifted.

"Giftedness to me is something you have a talent for, not necessarily academia but just something you have a flare for. In the way that I defined it there, then yes I would consider myself gifted" S7.

"I think gifted means that you excel in something. It might be academically, intellectually or artistically. CTYI means that we're gifted academically, so to speak. It means that we have a gift, not that we're special or we need special treatment." S10

The last comment above is a very interesting one. The student defines giftedness in broad terms but then believes that he qualifies for the category in terms of academic giftedness. This is similar in the literature to schoolhouse giftedness as defined by Renzulli who describes this as test taking giftedness. Given that the students who attend CTYI have qualified through an assessment then this theory holds. However I wonder if the student is being somewhat dismissive of his other talents. The student seems to be wary of this ability warranting special attention and potentially alerting others to its existence. This factors back into the feeling that the secondary students particularly just seem to lack confidence about their ability in relation to school. The idea that the student believes that he doesn't need special treatment in relation to the ability seems to contradict the notion that he is actually attending an out of school programme where he qualified because of this ability. The key fact to me here seems to be that the CTYI programme takes place outside of school in a different

environment and this seems to be a major contributing factor in its success for these students at least.

Five of the six primary school parents described their children as gifted academically. In spite of this some did not believe that this would mean that they would continue to perform excellently all the time.

"If it means someone who is academically in the top 5% of the population then yes as I think he falls into that category and he is lucky because of it. If it means someone who breezes through school and life without any struggles academically because they are so bright then no, at least I hope not as that would be difficult for him." P6

Three of the secondary school parents described their children as gifted. They believed from an early age that their child was different and would describe this as because they were gifted. The other three secondary school parents were uncomfortable with the term gifted in general and the negative connotations that surround it. One parent described gifted as "a loaded term" and expressed her dislike of it. Other parents believed that their children were intelligent but would not describe them as gifted.

"There are things that make me shy away from the term gifted to describe my child because you can be gifted in different ways. I think that there is a burden put on those kids who are labelled gifted because it's like you're so gifted the world had to make special accommodation for you." P10

Summary

This chapter analysed the key findings of this research in terms of the five emergent themes. These themes were: Attitude towards attending CTYI and Why they Attend; Level of Academic Satisfaction and Challenge at CTYI; Attitude and Academic Challenge at School; Ranking and Ability at School in relation to Peers; and Comfort with Ability and Comfort with term Gifted.

The students and parents show a positive attitude towards attending CTYI. The chance to study interesting courses that are not available at school and to cover subjects in more depth were the main reasons for attending from all groups. Notably secondary students stressed social reasons as a contributing factor in reasons for attending CTYI. They perceived making new friends and renewing old acquaintances as equally important to the academic reasons for attending.

Data from the MBTI shows that CTYI students have different learning types to regular students. These students mostly favour abstract thinking and have more interest in the special university style subjects available at CTYI. The MBTI results also show that around half CTYI students are introverted thinkers. These students tend to focus on the inner world of ideas and theories. Combined with the high level of abstract thinkers within this research these students are attracted by the academic nature of the courses on offer at CTYI and also to courses with a high theoretical content.

These students in turn are usually more challenged academically at CTYI than school. At primary school the students are attracted to the idea of studying new and exciting subjects. At secondary school they like the expert teaching and the university style curriculum. Their parents note a higher level of academic satisfaction with CTYI classes than school. They often believe that their child is not sufficiently challenged at school and they feel that this under-stimulation leads to frustration for their children. At primary school the parents believe that their child starts off liking school but then gradually switches off as they get older. At secondary school some parents felt that up to Junior Cert their child could get by without putting in too much effort. Those parents that had children who did Transition Year feel that it had largely negative consequences due to the lack of academic focus.

The students themselves seem to want to like school. They enjoy doing well in subjects and don't mind the social aspect of it. At primary school some are starting to realise that learning comes easier to them than other students. At secondary there is an acceptance that some subjects won't hold any challenge for them. The older students start to think of school as a means to getting to university and don't perceive it as a place of learning.

While most of the students rank themselves as better than their peers in certain academic subjects, the parents, particularly at primary rank them as better in all subjects. The students sometimes may underestimate their ability because of a lack of peer support in the school system. The Piers Harris results show that the students in this study have a higher academic self concept than other non gifted students but in

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some instances a lower social self concept. This lower self concept mostly occurs in areas where they see themselves compared to their peers.

While most of the students are comfortable with their ability, the younger students are more comfortable than the older ones. The Piers Harris results demonstrate that as one gets older your social self concept declines in teenage years. The parents are mostly comfortable with their child's ability but are not that comfortable with the term gifted to describe that ability. Some parents see giftedness as a negative stereotype and feel that it separates out their children as needing some sort of special attention. The secondary students too are not that happy with the notion of being described as gifted. Less than half of the secondary school students in the questionnaire described themselves as academically gifted and while some of the interview group saw themselves as gifted, many had different opinions on what constituted giftedness. These included ideas around where giftedness came from and whether giftedness occurs in different domains.

Conclusion

This analysis has shown that the students and their parents who participated in this research are a definable group in terms of special education. They are a group of people who have a more positive attitude in attending special out of school classes over school. They experience higher levels of academic satisfaction and challenge at these courses than they do at school. They experience frustration at school due to insufficient challenge and lack of interesting subjects.

These students have a distinct learning style that makes university style courses more appealing to them as they enjoy the abstract nature of the subjects and the specialist nature of the classes. They have a higher academic self-concept than other students but have a significantly lower social self concept in some social areas.

The students are mostly comfortable with their ability although this can decline as they get older. The secondary school students and parents are somewhat uncomfortable with the term gifted to describe their ability. Both parents and students rank themselves better than their peers at academic subjects but the parents significantly rank their children as better in all subjects while the students rank themselves better in certain subjects. This perceived underestimation of ability on the students part can be attributed to a level of discomfort with being described as gifted and a lack of support for their ability from their classmates.

These findings have large implications for this group in terms of best practice for teaching and future educational programming. These issues along with a summary of the research will be discussed in the concluding chapter.

Chapter 6: Conclusion

Introduction

The research set out to explore the perceived effects of Saturday and Summer programmes for high ability students from the perspective of the students themselves and their parents. Currently in Ireland there is no specific provision for gifted children to be catered for within the school system. Gifted children are not mentioned in the Education for People with Special Educational Needs (EPSEN) Act 2004 (DES, 2004). Therefore special needs teachers are not trained to work with gifted children and no resource hours are available for these children. While a small number of gifted children qualify for resource teaching if they have a learning difficulty, the vast proportion of high ability students are not catered for in primary and secondary schools. From my own direct experience of dealing with schools, I have found very few schools where there is a policy in place for working with academically talented students.

Currently the only external option available to gifted students in Ireland are classes provided by the Irish Centre for Talented Youth at Dublin City University. This research examined the academic and social effects on these programmes by engaging in some detailed research with the students themselves and also with the parents of the students. While there is very little research in Ireland in the area of gifted education there is also a shortage of studies worldwide from the perspective of gifted students and their parents so this thesis attempted to bridge a gap in the current literature by providing a comprehensive analysis of the effects of the Saturday and summer programmes run in this country. In Ireland to date there has been no large doctoral study of high ability children so this thesis will be a welcome addition to our knowledge of this important group in the Irish educational system.

As well as examining the academic and social effects of an out of school programme I was also interested in finding out information about the child's perception of their regular school and their opinion of their ability relative to their peers. I wanted to see if they were satisfied at school and whether they received appropriate challenge in the school classroom. I wanted to compare these results with those of their parents to see if they too felt sufficiently challenged at school and where their parents believed their child's abilities lay in relation to their peers at school. This chapter will detail the findings from this study and the implications of these results for educators and policy makers.

Defining giftedness

The literature review in the second chapter detailed the lack of consensus amongst researchers in relation to defining giftedness. While reviewing this literature I became increasingly interested in changes in directions that the field has undergone over the years. From starting with the traditional notion that IQ was the only way to measure intelligence the field has moved now to incorporating multi-dimensional models of giftedness. I became interested in the notion of giftedness in an Irish context and indeed how the people involved in this study might define it. For example the organisation where I work is called the Irish Centre for Talented Youth (CTYI) and doesn't make reference to the term gifted yet the assessment procedures used to identify students at the 95th percentile give a notion that the organisation would deal with gifted students.

The literature review analysed how the latest attempt at guidelines from an Irish perspective (NCCA, 2007) use the term exceptionally able to describe these children. In this instance there seems to be a direct move away from the term gifted. Yet from a

research perspective the term gifted is largely used in the literature. Indeed many of the main academic journals in the area, Gifted Child Quarterly, Journal for the Education of the Gifted, Gifted Child Today, Gifted Child International use the term gifted in the title. The research results from this thesis show that many of the secondary school students (over 40%) are uncomfortable with this term gifted to describe their ability. In fact in the quantitative study less than half of the students described themselves as academically gifted. A similar number of primary and secondary school parents are uncomfortable with this term to describe their child's ability. While the questionnaire responses show that the majority of the primary school students are comfortable with the term gifted to describe their ability, the follow up interviews seemed to show a lack of understanding of the concept amongst the primary school interviewees.

The qualitative interviews in this study gave some interesting results in relation to this issue. The secondary school students defined giftedness in their own terms. They saw giftedness as areas where people have talents. They didn't confine this to academia and saw giftedness in other domains such as sports as well. This domain specific model of giftedness is similar to that of VanTassel-Baska (2005). Furthermore all of the students seemed to see themselves as talented in subject specific areas similar to the theory of giftedness proposed by Brody and Stanley (2005). In this context most of the secondary students described themselves as academically gifted. Giftedness to these students is something in a specific subject within a particular domain.

For researchers this may be an area that we need to look at more carefully in the future. If a large number of students that we are advocating for are uncomfortable

with the term gifted then we may need to start describing it in other terms. I believe the NCCA are right in calling the students exceptionally able or at CTYI where the students are referred to as academically talented rather than gifted. This is something that could be considered for future research.

Designing the research

The major conflicting paradigms within gifted research are described in detail in chapter 3 of this thesis. These somewhat conflicting theories around intelligence largely influenced my research design. Cohen, Ambrose and Powell (2000) point out that mechanistic philosophical beliefs (reality as machine like) encourage assumptions that intelligence is objectively measurable and culture transcendent. Such assumptions obscure alternative conceptions of intelligence and perpetuate long-established sorting practices that ignore gifts and talents in other domains. These theories have dominated the historical development of research in this area.

Cohen (2006) analysed the last 16 years of conceptual foundation based papers from NAGC conferences. Some 110 presentations were given in the area of conceptual giftedness. These could be further broken into articles containing conceptions and definition. Cohen noted that from analysing these, consensus had not been reached on the nature of giftedness or how giftedness, talent, intelligence and creativity are related. In this paper Cohen also proposes that most theorists have a better understanding of the mechanistic worldview meaning that the world is machine like which is static, stable and measurable. She calls for more understanding and a greater insight for future research. This view is supported by Ambrose (2005) who believes that when one world view dominates thought in a field then the benefits and harmful

effects are magnified. With the growth of multidimensional models of intelligence and advent of theories that highlight the need for other measures to identify gifted children there became a growth in the number of researchers interested in trying out some qualitative research.

Coleman, Dabbs and Guo (2007) research the state of qualitative research in gifted education as published in American journals between 1985 and 2003. This article noted that the first paper incorporating qualitative research in gifted education only appeared in 1985 and then there was no other until 1990. Since then there has been huge growth in the amount of research published using this method. Influenced by an article from Coleman, Cross and Sanders (1997) that demonstrates the need for the use of mixed methodology within the field. I decided to embark on a sequential mixed methods strategy as proposed by Creswell (2009). The themes that emerged from the qualitative interviewing greatly influenced the rest of my study and the analysis. These included: attitude towards attending CTYI and reasons for attending; academic satisfaction and challenge with classes at CTYI; academic satisfaction and challenge with classes at school; ranking of ability in subjects at school; and perceptions of comfort with ability.

Policy Implications

In this study the students who participated in the research had been invited to participate in programmes for high ability children at various universities around the country. Courses on offer would be college like subjects that would not usually be available in school and students would get the opportunity to study more

academically challenging subjects at a faster pace and greater depth than they would be used to at school. This research has shown that in the opinion of parents and students who have participated in programmes for high ability primary school children that these students have more academic satisfaction in the CTYI courses than school and that they have a more positive attitude in attending the CTYI classes than school.

Both the quantitative and qualitative findings indicate that these students sometimes feel a lack of academic challenge at school. This finding was reiterated by all students and parents. There is a definite policy implication here that these students need some form of extra stimulation to keep them academically challenged. While we have seen that the students advocated a multidimensional approach to giftedness, it was somewhat surprising to see that most of them viewed giftedness as something innate rather than something that is achieved through interaction with the environment. Many of the students saw giftedness as a natural ability that you were born with rather than acquired through tuition. The explanation for this could be down to the frustration that many feel with their schooling with all of the students reporting a lack of sufficient challenge at school.

This research has shown that students who are given this stimulation at classes run by CTYI respond by demonstrating a higher level of academic satisfaction and a more positive attitude to attending than they do at school. I would advocate that as students who have specific learning difficulties are given resource hours or extra materials, high ability students need to have special classes provided for them either in an out of school context or at school and there should directly be funding available for students

to avail of this. The current budget for special needs education in Ireland is one billion euro and all of these resources are allocated to students who fall on the opposite end of the spectrum to high ability children. I believe, given the lack of provisions at school that allocating money towards out of school programmes to cater for high ability children is a relatively cheap option for policy makers. The facilities within the third level institution are already there and the significant cost goes towards training and paying the instructors on these courses. Given the large number of postgraduate students at various universities who are experts in specialist areas that the students have shown to be interested in, this option may not prove too expensive.

Teaching Implications

The implications for teaching in relation to this study are significant. The Myers-Briggs Type Indicator results show that CTYI students have a strong preference for Intuition over Sensing (N) and a much higher proportion of Introverts than the general population. We have found that Intuitive or N types make up over 75% of the CTYI population. These students tend to do better in school early on as they have a preference for working with symbols and concepts. Early mathematical and verbal theory tends to come to them quickly. According to Lawrence (1982), writers of paper-and-pencil tests of intelligence are usually intuitives. They are unaware that these tests are biased towards other intuitives, and results show that IN 's followed by EN 's score the highest on these intelligence tests. From chapter 4 we can see that this is reflected in the four dominant CTYI types, INFP, ENFP, INTP and ENTP.

Van (1992) believes that the Introversion-Intuitive (IN) combination is particularly associated with scholastic potential, because this preference has an affinity for

language. Research has shown that as few as one in sixteen people would be an introverted intuitive in a regular school population but this proportion would be much higher at a college level (MacDaid, McCaulley & Kainz, 1986). In this sample, the number of CTYI students falling into this category is over 35%. McCaulley and Natter (1974) make an interesting observation about the conflict within schools. Traditionalists are demanding discipline and the three R's. This approach is tied in with the sensing- thinking- judging individual which makes up a very small size of the gifted population and a much larger proportion of the main population. Intuitive Introverts (IN's) tend to prefer teachers who are experts in their particular fields and they are also interested in the theory of subjects rather than the actual coursework. This ties in to other parts of this research where significantly a large number of students and parents indicated that the child attended because the particular subject interested them. Given that the courses on offer are not ones usually studied at school this is an interesting development in our thinking about the education of high ability students. This would seem to indicate that extra-curricular subjects or the need to go beyond the curriculum in everyday subjects may be necessary to sufficiently challenge the academically talented child.

Social Implications

An interesting finding from this research from both the questionnaire and interview data is that parents significantly rank their children better at almost all academic subjects relative to their peers at school than the children do themselves. Is this a case that the parents are overestimating the child's ability or are the children underestimating their own ability? On one level, the interview data seems to support the view that parents are overestimating their child's ability. Some of the students

recognise their ability in subject specific areas while there parents reflect this ability across the board in all subjects.

However the research has shown that the parents sometimes perceive the child's performance in subjects as related to the child's level of effort rather than their ability. The secondary school students also state that they usually try harder in subjects where they have an interest in the area or where they receive support for their endeavours. I believe that the students lower ranking of ability compared to their parents could be explained by looking at the data collected relating to levels of encouragement received for the child in relation to their ability. While both primary and secondary students felt that they got the highest level of encouragement from parents in relation to their ability, over half of them perceived little or no support for classmates. We have seen as well that the students gradually show a decline in comfort with their ability as they get older. In this context they may be underestimating their ability relative to their peers in order to fit in better. The Piers Harris Children's Self-Concept results support this theory. While the research shows that the students have a higher self-concept in academic areas they have lower scores in areas such as Popularity and Happiness and Satisfaction.

The research has also shown that the importance for social benefits from attending CTYI is something that increases as one gets older. From the questionnaire data many of the secondary school students noted that they attended the courses initially to make new friends or to renew old acquaintances. They also found that improving self confidence or meeting other like minded people as being one of their main achievements as a result of attending these programmes.

Being perceived as gifted is not an important consideration for the students. More than half of the secondary school students do not describe themselves as gifted with many seeing negative connotations with the term. The primary students don't share this negativity from the quantitative data but the subsequent qualitative interviews revealed that very few of the primary students had any understanding of the concept of giftedness. The primary and secondary parents were somewhat uncomfortable with the term gifted and the only parents who didn't see it in a negative fashion were those from an educational background who had a deeper understanding of the term. The research has shown that the students are sensitive to social cues and in this context as they get older I believe the label of being gifted is a difficult one for them to shoulder with the lack of support for this from their classmates.

This is another reason why out of school programmes like CTYI are successful. The opportunity to study in a different environment with like minded peers allows high ability students the chance to fulfil their potential. The students are free of the social barriers that hold them back at school. This explains why the research has shown that the students have a more positive attitude to attending CTYI than school.

Future research

While the findings from this study are very interesting they lead to many questions about possible future research. Firstly the study involved a group of students and parents who had attended a programme with the Irish Centre for Talented Youth, a future piece of research might identify and find out about students who have just been

assessed and have not attended any classes to see if they have different perceptions than those who have experienced classes. It would be also interesting to study a group who are assessed and identified as gifted and choose not to attend out of school programmes to see if there are any differences with them when they finish school in terms of academic performance, social adjustment, third level college that they choose to attend and comfort with ability.

Given the findings with the Myers-Briggs Type Indicator it would be interesting to study teachers using this measure. Performing a Myers-Briggs study or regular primary and secondary teachers in Ireland and comparing them with Myers-Briggs scores form CTYI teachers at primary and secondary could yield some interesting results that could help to drive policy in this area. Similarly it would be useful to have a comparative group of Irish students for the Piers Harris Self-Concept Children's scale. Results could be compared with an Irish population who have been identified as gifted who have not attended an out of school programme with those that have been identified and are attending programmes.

While the current CTYI model uses testing as a means of identification, Passow and Frasier (1996) believe that the prominence of these assumptions of intelligence as quantifiable by IQ and a static condition has led to the difficulties in the field including the under-inclusion of children from racial and ethnic minorities and children from lower socio-economic groups. We need to radically rethink our assessment criteria to ensure adequate representation from these groups.

If however we were not to use testing then there could be a problem with using peer nomination given that this research has shown that the students have a tendency to underestimate their abilities and it's also a problem with parent nomination as the research has shown that parents tend to over estimate their child's ability. Teacher nomination could be difficult as sometimes in a primary context teachers are nominating students who are excelling in school tasks and these may not be the creative innovators that are needed for these programmes. Furthermore the teacher at primary can struggle to identify the bright child who has subject specific ability if that subject is not one that the teacher values. At secondary school where there is different teachers for the subjects there can be a problem with the child being identified too late or again if the child is gifted in non curricular areas. A future piece of research evaluating identification options would be a welcome addition to the Irish literature on gifted education.

Finally, in the immediate future I believe it would be worthwhile to assess the short term impact of these programmes when the students return to school. Academically these students report a higher level of satisfaction by attending CTYI courses. Does this feeling of being challenged have a positive effect when they return to school or does it make them perceive that school is more limiting? Socially the students have reported an increase in self confidence by attending CTYI, it would be useful to see if this effect lasts when they return to school.

Looking at the bigger picture I believe it would be very useful to continue this study and assess the long term impact of a programme like CTYI on these students. Given that there was a large sample population of both primary and secondary students and

parents it would be very interesting to see how these students develop as their school careers continue. Furthermore it would be interesting to track these students at third level to see if attending CTYI had an impact of their course choice, their adjustment to college life and their overall happiness and satisfaction with university. This longitudinal study could also follow them as they choose careers to see if attending the CTYI programme has any long term effects on these students.

Conclusion

This thesis has proved that students who have been identified as having high ability and attended courses with the Irish Centre for Talented Youth largely derive a high level of academic satisfaction with these classes and have a positive attitude towards attending. Their parents too believe that their children have a high level of satisfaction with the out of school classes and they perceive that their children also have a largely positive attitude towards attending. The research has shown that these benefits are both academic and social. Academically the students get the chance to study a subject that they wouldn't normally do at school and this course would usually challenge them a higher level than school. Socially the students get a chance to meet like minded peers and make some new friends.

At school the research has demonstrated that high ability students at primary and secondary school rank themselves as significantly better than their peers in academic subjects. The study also found that the parents too rank their child as superior than their peers in these subjects but rank them significantly higher than the children do themselves. Most students and parents perceive that their highest level of support comes from parents with over half of both groups stating that they receive little or no

support from their classmates. The study has shown that while most high ability students and parents in this study are comfortable with their ability they are less comfortable with the term gifted to describe this ability. The results show that the children have similar global self-concepts than their non gifted peers but higher academic self-concepts. In some social areas the gifted students have lower self-concepts than regular students.

The school data from both the questionnaires and the interviews reveals that on the whole while both the primary and secondary school students want to have a positive attitude towards school, this is sometimes difficult because of a lack of sufficient challenge at school. The students are reluctant to pursue academic interests at school because of a lack of support from peer groups in relation to their ability. From the questionnaire data the primary school students are significantly more academically satisfied with school than the secondary students. Secondary school students in this study sometimes respond to this by seeing school as means to gaining the points for university and little else. The parents have lower levels of satisfaction with school than the children particularly at primary school. They believe that the curriculum at school does not really challenge the students. Furthermore the schools themselves do not have adequate resources or materials for the high ability student.

This research has shown that out of school programmes provide increased academic stimulation and challenge for the gifted student in Ireland. The first egalitarian criticism of special programmes that these students can perform adequately without intervention seems questionable when one considers the findings from this research. The students and parents in this study believe that the school does not provide them

with adequate challenge and the schools themselves do have sufficient resources or materials to deal with high ability students. The second egalitarian criticism that mainstream students suffer without having gifted students in their class also is doubtful as this research has shown that the students in this study perceive a huge lack of support from their classmates in relation to their ability. In any case an out of school programme satisfies both arguments. The students can stay in their mainstream classes for most of their schooling but avail of special programmes on Saturday and during summer. I believe the State should make some financial contribution towards these classes particularly to allow a proportional representation of students from disadvantaged areas

I believe the research has shown that the gifted are a separate definable group from an educational perspective. The data from the Myers-Briggs further illustrates this point. From these results we have seen that high ability students tend to be dominant in Perception (P) and Intuition (N) and this has implications for what might be the best way for them to get the most out of their education. The dominance of Perception (P) presents a need for them to have more information about a topic than may traditionally be presented in a text book. They might need to explore avenues beyond one source and back up or expand the existing information with new knowledge. The dominance of Intuition (I) over Sensing (S) presents implications into the way we teach these students. Learning in a categorical step by step fashion traditionally used in schools may not be suited to these students. Their preference for Intuition leads them to want to learn in an individual fashion and find out new information for themselves. Having access to an out of school programme in a university setting gives these student access to knowledge and resources that would not be available at school.

In my opinion this research has added significantly to the knowledge of how we understand and work with gifted students in Ireland. We have seen that parents and students have a strong academic satisfaction and a largely positive attitude towards attending out of school programmes for high ability children. For the first time we have compared these students attitudes at out of school programmes with that of school and found that these students are not sufficiently challenged at school. The parents too have noted frustrations within the school system for their children with regard to suitable curricula and lack of resources.

Through the student themselves we have found that there are huge differences between primary and secondary school particularly in social development. As the high ability student gets older their comfort with ability gradually decreases along with areas of their social self-concept. In their own words these students see giftedness from a multidimensional perspective which they contribute to usually from a subject specific perspective. I believe out of school programmes are necessary for them to address this decline in self confidence and to become more comfortable with their ability.

This is the first large scale study of its kind in Ireland and has demonstrated many interesting findings that will be relevant for teachers, researchers, policy makers, parents and hopefully the students themselves. Too often the needs of high ability students are ignored and this study will hopefully go some way to recognising this group as a special population with significant educational needs.

References

Adams-Byers, J., Whitsell, S.S., & Moon, S.M. (2004). Gifted students' perceptions of the academic and social/emotional effects of homogenous and heterogeneous grouping. *Gifted Child Quarterly,* 48, 7-20.

Albert, R. (1969). Genius: Present day status of the concept and its implications for the study of creativity and giftedness. *American Psychologist*, 24 743-753

Ambrose, D. (2005). World-View Entrapment: Moral-ethical implications for gifted children. *Journal for the Education of the Gifted*, 23 (4), 159-186

Anderson, G. & Arsenault, N. (2001). *Fundamentals of Educational Research.* London: Routledge Falmer.

Archambault, F.X., Westberg, K.L., Brown, S.W., Hallmark, B.W., Emmons, C.L. & Zhang, W. (1993). *Regular classroom practices with gifted students: Results of a national survey of classroom teachers.* Storrs, CT: National Research Center on the Gifted and Talented.

Armenta, C. (1999). A shift to identity: A journey to integrity in gifted education. Journal. *Journal for the Education of the Gifted* 22 (4), 384-401

Baker, J.A., Bridges, R, & Evans, K. (1998). Models of underachievement among gifted preadolescents: The role of personal, family and school factors. *Gifted Child Quarterly,* 42, 5-14.

Barnett, L.B. & Durden, W.G. (1993). Education patterns of academically talented youth. *Gifted Child Quarterly*, 37 (4), 161-168.

Beane, J.A.,& Lipka, R.P. (1984). *Self-concept, self-esteem, and the curriculum.* Boston: Allyn and Bacon.

Benbow, C.P. (1992). Academic achievement in math and science between ages 13 and 23: Are there differences in the top one percent of ability? *Journal of Educational Psychology,* 84, 51-61.

Benbow, C.P. & Stanley, J.C. (1983a). Inequity in equity. How "equity" can lead to inequity for high potential students. *Psychology*, *Public Policy and Law* 2, 249-292

Benbow, C.P. & Stanley, J.C. (1983b). *Academic precocity: Aspects of its development.* Baltimore, MD: The Johns Hopkins University Press.

Binet, A., & Simon, T. (1916). *The intelligence of the feeble-minded* (E.S. Kite translated) Baltimore MD, Williams & Wilkins.

Bireley, M. (1991). Learning Styles: One way to help gifted adolescents understand and choose life styles. In M.Bireley & J. Genshaft (Eds). *Understanding the gifted adolescents: Educational, developmental and multicultural issues.* pp 189-200. New York: Teachers College Press.

Blaikie, N. (2000). *Designing Social Research*. Cambridge: Polity.

Bloom, B.S. (Ed.) (1985). *Developing talent in young people*. New York: Ballantine Books.

Bogdan, R.G., & Biklen, S.K. (1992). *Qualitative Research for Education* (2nd Edition) Boston, MA: Allyn & Bacon.

Borland, J.H. (1990). Postpositivist inquiry: Implications of the "new philosophy of science" for the field of the education of the gifted. *Gifted Child Quarterly*, 34, 161-167.

Borland, J.H. (1997). The construct of giftedness. *Peabody Journal of Education*, 72 (3), 6-20.

Bouchard, T. J., Lykken, D. T., McGue, M., Segal, N. L., & Tellegen, A. (1990). Sources of human psychological differences: The Minnesota study of twins reared apart. *Science*, **250**, 223-228

Bracken, B.A. (1980). Comparison of self-attitudes of gifted children and children in a non gifted normative group.

Brody, L.E. (1998). The talent searches: A catalyst for change in higher education. *Journal of Secondary Gifted Education*, 9, (3), 124-133.

Brody, L.E., & Benbow, C.P. (1987). Accelerative Strategies: How effective are they for the gifted? *Gifted Child Quarterly,* 3, 105-110.

Brody, L.E., & Benbow, C.P. (1986). Social and emotional adjustment of adolescents extremely talented in verbal or mathematical reasoning. *Journal of Youth and Adolescence,* 15, 1-18.

Brody, L.E., & Stanley, J.C. (2005). Youths Who Reason Exceptionally Well Mathematically and/or Verbally: Using the MVT:D4 Model to Develop Their Talents *In* R.J. Sternberg & J.E. Davidson (Eds.) *Conceptions of Giftedness* pp. 20-38. New York: Cambridge University Press.

Bryman, A. (2004). *Social research methods.* New York: Oxford University Press

Burt, C. (1968). Is intelligence normally distributed? *British Journal of Statistical Society*. **16**, 175-190.

Byrne, B.M. (1996). Academic Self-Concept: Its structure, measurement and relation to academic achievement. In B.A. Bracken (Ed), *Handbook of Self-Concep. Developmental, social and clinical consideration* pp 287-316 New York: Wiley

Carroll, J.B. (1993). *Human cognitive abilities: A survey of factor analysis studies.* Cambridge: Cambridge University Press

Charlton, J. C., Marolf, D. M., & Stanley, J. C. (2002). Follow-up insights rapid educational acceleration. *Roeper Review*, 24 (3), 145-151.

Cohen, L.M. (2006). Conceptual foundations for gifted education: Stock-taking. *Roeper Review* 28, (2) 91-110

Cohen, L. M. , Ambrose, D. and Powell, W. N. (2000) Conceptual foundations and theoretical lenses for the diversity of giftedness and talent. In Heller, K. A. , Monks, F. J. , Sternberg, R. J. and Subotnik, R. (Eds) *International handbook of giftedness and talent* pp. 331-344. 2nd ed., Pergamon , Oxford, UK

Cohen, L.M., Manion, L., & Morrison, K. (2007). *Research Methods in Education.* New York: Routledge.

Cohen, R., Duncan, M., & Cohen, S. (1994). Classroom peer relations of children participating in an enrichment pull out programme. *Gifted Child Quarterly*, 38, 33-37.

Colangelo, N., & Davis, G.A. (2003). Introduction and Overview. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 3-10) Boston: Allyn & Bacon.

Coleman, L.J. (2003). An essay on rethinking theory as a tool for disciplined inquiry. *In* J.H. Borland (Ed.) *Rethinking Gifted Education* pp. 61-71. New York: Teachers College Press.

Coleman, L.J. (2004). Is Consensus on a Definition in the Field Possible, Desirable, Necessary? *Roeper Review* 27, (1) 10-11

Coleman, L.J. & Cross, T.L. (1988). Is being gifted a social handicap? *Journal for the Education of the Gifted,* 4, 41-56.

Coleman, L. J., Dabbs, C. S., & Gao, A. (2007). The state of qualitative research in gifted education as published in American journals. *Gifted Child Quarterly*, 51(1), 51-63

Coleman, L. J., Sanders, M. D., & Cross, T. L. (1992). *Alternative inquiry in education: Hey can you paradigm?* Paper presented at the NAGC conference, Los Angeles, CA.

Coleman, L. J., Sanders, M. D., & Cross, T. L. (1997). Perennial debates and tacit assumptions in the education of gifted children. *Gifted Child Quarterly*, 41(3), 105-111

Cornell, D.G. (1983). Gifted children: The impact of positive labelling on the family system. *American Journal of Orthopsychiatry,* 53, 322-335.

Cox, J, & Daniel, N (1984). The pull out model. *Gifted Child Today*. Sept-Oct 55-60.

Cox, J, Daniel, N & Boston, B.O. (1985). *Educating Able Learners: Programs and Promising Practices.* Austin: University of Texas.

Creswell, J.W., Plano Clark, V.L. (2007). *Designing and Conducting mixed methods research.* Thousand Oaks, CA: Sage.

Creswell, J.W. (2009). *Research Design.* Thousand Oaks, CA: Sage.

Cross, T.L. (1994) Alternative Inquiry and Its Potential Contributions to Gifted Education: A Commentary. *Roeper Review* 16 (4), 284-285.

Cross, T.L. (2003). Rethinking Gifted Education: A Phenomenological Critique of the Politics and Assumptions of the Empirical-Analytic Mode of Inquiry. *In* J.H. Borland (Ed.) *Rethinking Gifted Education* pp. 72-79. New York: Teachers College Press.

Cross, T.L., & Coleman, L.J. (2005). School-Based Conception of Giftedness: *In* R.J. Sternberg & J.E. Davidson (Eds.) *Conceptions of Giftedness* pp. 52-64. New York: Cambridge University Press.

Cross, T.L., Speirs Neumesiter, K.L., & Cassady, J.C. (2009). Psychological Types of Academically Gifted Adolescents. *Gifted Child Quarterly,* 51, (3), 285-294.

Csikszentmihalyi, M. (2000). *Becoming adult: How teenagers prepare for the world of work.* New York: Basic Books.

Damico, S., & Dalsheimer, B. (1976). *The relationship of personality type on achievement on the Florida twelfth grade state-wide placement test.* Gainesville, FL: PK Yonge's Laboratory School.

Daurio, S.P. (1979). Educational enrichment versus acceleration: a review of the literature. *In* W.C. George, S.J. Cohn, J.C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 13-63) Baltimore, MD: The Johns Hopkins University Press.

Davis, G.A. & Rimm, S.B. (2003). *Education of the Gifted and Talented.* (5th Edition.) New Jersey: Prentice Hall.

Delcourt, M.A.B.,Loyd, B.H., Cornell, D.G. & Goldberg, M.D. (1994). *Evaluation of the effects of programming arrangements on student learning outcomes.* Storrs, CT: National Research Center on the Gifted and Talented.

Delbridge-Parker, L., & Robinson, D. (1989). Type and academically gifted adolescents. *Journal of Psychological type,* 17, 66-72.

Demo, D.H., (1992). The self concept over time: research issues and directions. *Annual Review of Sociology,* 18, 303-326.

Denscombe, M. (2008). *Ground Rules for Good research.* Buckingham: Open University Press.

Department of Education and Science (1993) *Report of the Special Education Review Committee* (SERC) Dublin: The Stationery Office

Dept of Education and Science (2005). *An evaluation of Curriculum Implementation in Primary Schools – English, Mathematics and Visual Arts.* Dublin: The Stationary Office

Detterman, D. K., & Ruthsatz, J. M. (2001). The importance of individual differences for exceptional achievement. In N. Colangelo & S. G. Assouline (Eds.), *Talent development IV: Proceedings from the 1998 Henry B. & Jocelyn Wallace National Symposium on Talent Development* (pp. 135–154) Scottsdale, AZ: Gifted Psychology Press.

Devlin, B., Daniels, M., & Roeder, K. (1997). The heritability of IQ. *Nature*, **388**, 468-471.

Enerson, D.L. (1993). Summer residential programs: academics and beyond. *Gifted Child Quarterly*, 37 (4), 169-176

Ericsson, K.A. (1996). *The road to excellence: The acquisition of expert performance in the arts and sciences, sports and games.* Mahwah, NJ: Lawrence Erlbaum Associates.

Ericsson, K.A. & Lehmann, K.A.. (1996). Expert and Exceptional Performance: Evidence of Maximal Adaptation to Task Constraints *Annual Review of Psychology*, 47, 273-305

Ezzy, D. (2002). *Qualitative Analysis: Practice and Innovation.* London: Routledge.

Falk, R.F., & Miller, N.B. (1998). The reflexive self: A sociological perspective. *Roeper Review,* 20, 150-153.

Feldhusen, J.F. (1991). Saturday and summer programs. *In* N. Colangelo & G.A. Davis (Eds.) *Handbook of gifted education* (pp. 197-208). Boston, MA: Allyn & Bacon

Feldhusen, J.F. (1997) Secondary services, opportunities and activities for talented youth. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (2nd ed.; pp. 189-197) Boston: Allyn & Bacon

Feldhusen, J.F., & Jarwan, F.A. (1993)**.** Identification of gifted and talented youth for educational programmes. *In* K.A. Heller, F.J. Monks & A.H. Passow (Eds.) *The International Handbook of Research on Giftedness and Talent*, pp. 233-253. Oxford: Pergamon Press.

Feldhusen, J.F, & Ruckman, D.R. (1988). A guide to the development of Saturday programs for gifted and talented youth. *Gifted Child Today*, 11 (5),56-61

Feldhusen, J.F, & Sokol, L. (1982). Extra programming to meet the needs of gifted youth: Super Saturday. *Gifted Child Quarterly,* 26 (2), 51-56

Feldhusen, J.F, & Wyman, A.R (1980). Super Saturday: Design and implementation of Purdue's special program for gifted children. *Gifted Child Quarterly,* **24** (1), 15-21

Flynn J.R. (1984)**:** *The mean IQ of Americans. massive gains.* New York: Harper and Row

Forsyth, P. (1987). A study of self-concept, anxiety, security in gifted, French immersion and regular classes. *Canadian Journal of Counselling,* 21, 153-156.
Foucault, M. (1995) *Discipline and Punish: The birth of the prison.* New York: Vintage
Fox, L.H. (1979). Programmes for the gifted and talented: An overview. *In* A.H. Passow (Ed.) *The gifted and talented, their education and development*. Chicago: NSSE yearbook.

Freeman, J. (1985). Emotional aspects of giftedness. *In* J. Freeman (Ed.) *The psychology of gifted children* (pp. 247-254). New York: Wiley

Freeman, J. (1992). Education for Gifted in a changing Europe. *Roeper Review*, 14, (4) 198-201.

Friedman-Nimz, R, O'Brien, B Frey, B.B. (2005) Examining Our Foundations: Implications for Gifted Education Research. *Roeper Review* 28 (1) 45-52

Frost, P. (2005). The CTY summer school model: devolvement, adaptation and extrapolation at the National Academy for Gifted and Talented Youth (England). *High Ability Studies* 16, (1), 137–153.

Gallagher, J. (1975). *Teaching the gifted child* (Second edition). Boston, MA: Allyn & Bacon.

Gallagher, J. (1993). Current status of gifted education in the United States. *In* K.A. Heller, F.J. Monks, R.J. Sternberg & R.F. Subotnik(Eds.) *The International Handbook of Research on Giftedness and Talent*, pp. 755-770. Oxford: Pergamon Press

Gallagher, S.A. (1990). Personality patters of the gifted. *Understanding Our Gifted,* 3, 11-13.

Galton, F. (1869). *Hereditary genius: An inquiry into its laws and consequences.* :London: Macmillan.

Gardner, H. (1983). *Frames of Mind.* New York: Free Press.

Gardner, H. (1987). The theory of multiple intelligence. *Annals of dyslexia*, **37** 19-35.

Gardner, H. (1999). *Intelligence reframed: Multiple Intelligences in the 21st century.* New York: Basic Books.

Giddens, A. (1975). *Positivism and Sociology.* London: Heinemann.

Jensen, A.R. (1998). *The g factor: the science of mental ability*. Westport, CT: Praeger.

Gardner, H. (1999). *Intelligence reframed: Multiple Intelligences in the 21st century.* New York: Basic Books.

Goldstein, D., & Wagner, H. (1993). After school programs, competitions, school Olympics, and summer programs. *In* K.A. Heller, F.J. Monks & A.H. Passow (Eds.) *The International Handbook of Research on Giftedness and Talent*, pp. 593-605. Oxford: Pergamon Press.

Gottfredson, L.S. (1997). Why *g* matters: The complexity of everyday life. *Intelligence*, 24, 79-132

Gottfredson, L. S. (2003). The science and politics of intelligence in gifted education. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 24-40) Boston: Allyn & Bacon.

Gross, U. M. (2003). International Perspectives. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 547-557) Boston: Allyn & Bacon.

Hany, E.A., & Grosch, C. (2007). Long term effects of enrichment summer courses on the academic performance of gifted adolescents. *Educational Research and Evaluation,* 13 (6), 521-537.

Harter, S. (1983). Developmental perspectives on the self-esteem. In E.M.Hetherington (Ed). *Handbook of child psychology: Vol 4. Socialisation, personality, and social development.* pp 275-386 New York: Wiley.

Harter, S. (1990). Issues in the assessment of the self-concept of children and adolescents. In A. La Greca (Ed). *Childhood Assessment: Through the eyes of a childand.* pp 292-326 Boston: Allyn and Bacon.

Hawkins, J. (1997). Giftedness and psychological type. *Journal of secondary Gifted Education,* 9, 57-67

Hays, T.S. (1993). An historical content analysis of publications in gifted education journals. *Roeper Review* 16, (1) 41-43

Heller, K.A. (1989). Perspectives on the diagnosis of giftedness. *German Journal of Psychology*, 13, 140-159.

Heller, K.A. &, Ziegler A. (2000). Conceptions of giftedness from a meta-theoretical perspective. *In* K.A. Heller, F.J. Monks, R.J. Sternberg & R.F. Subotnik(Eds.) *The International Handbook of Research on Giftedness and Talent*, (2nd edition) pp. 3-23. Oxford: Pergamon Press.

Herrnstein, R. J. and Murray, C., (1994). *The Bell Curve.* New York: The Free Press

Hertzog, N.B. (2003). Impact of gifted programs from students perspectives. *Gifted Child Quarterly*, 47 (2) 131-143.

Hobson, J.R. (1963). High school performance of underage pupils initially admitted to kindergarten on the basis of physical and psychological examinations. *Educational and Psychological Measurement*, **23** (1), 159-170

Hoffman, J.L., & Batkouski, M. (1981). A summary of Myers-Briggs Type Indicator research applications in education. *Research in psychological type*, 3 3-41.

Hoge, R.D., & McSheffrey, R. (1991). An Investigation of Self-Concept in Gifted Children. *Exceptional Children,* 57, 238-245.

Hoge, R.D., & Renzulli, J.S. (1993). Exploring the Link between Giftedness and Self-Concept. *Review of Educational Research,* 63, (4), 449-465.

Hoogeveen, L., Van Hell, J.G., & Verhoeven, L. (2009). Self-Concept and Social Status of Accelerated and Nonaccelerated Students in the First 2 Years of Secondary School in the Netherlands. *Gifted Child Quarterly,* 53 (1), 50-67.

Horvat, E.M., Weininger, E.B. & Lareau, A. (2003). From social ties to social capital: Class differences in relations between schools and parent networks. *American Educational Research Journal,* 40 (2) 319-351.

Howe, M. J. A. (1999) *Genius Explained*. New York: Cambridge University Press

Howell, H., & Bressler, J. (1988). Research on teaching styles of teachers of the gifted*. Roeper Review,* **10** (3), 144-148

Howley, A., Howley, C.B., & Pendarvis, E.D. (1986). *Teaching gifted children*. Boston: Little, Brown

Husserl, E. (1962). *Cartesian Meditations*. The Hague: Matius Nijhof.
Jensen, A. R. (1998). *The g factor: the science of mental ability.* Westport, CT: Praeger.

Jensen, A. R. (2002). Galton's legacy to research on intelligence. *Journal of Biosocial Science, 34,* 145-172.

Johnson, B., & Onwuegbuzie, A. (2006). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, *33*(7), 14-26.

Jung, C.G. (1971). *Psychological Types, Collected Works*, Volume 6, Princeton, N.J.: Princeton University Press

Lee, S.Y., Matthews, M.S. & Olszewski-Kubilius, P. (2008). A National Picture of Talent Search and Talent Search Educational Programmes. *Gifted Child Quarterly*, 52 (1), 55-69.

Lewis, J.D., & Knight, H.V. (2000) Self-Concept in Gifted Youth: An Investigation Employing the Piers-Harris Subscales Gifted Child Quarterly*, 44 (1), 45-53*

Lubinski, D., & Benbow, C.P. (1994). The Study of Mathematically Precocious Youth: The first three decades of a planned 50 year study of intellectual talent. In R.F. Subotnik & K.D. Arnold (Eds), *Beyond Terman: Contemporary longitudinal studies of giftedness and talent.* Pp 225-281 Norwood, NJ: Ablex.

Lupkowski-Shoplik, A., Benbow, C.P., Assouline, S.G., & Brody, L.E. (2003). Talent Searches: Meeting the needs of academically talented youth. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 204-218) Boston: Allyn & Bacon.

Kanoy, R.C., Johnson, B.W., & Kanoy, K.W. (1980). Locus of control and self-concept in achieving and under-achieving bright elementary students. *Psychology in the Schools,* 17, 395-399.

Karnes, F.A., & Wherry, J.N. (1981). Self-concepts of gifted students as measured by the Piers-Harris Children's Self-Concept Scale. *PsychologicalReports,* 49, 903-906.

Kelly, K., & Colangelo, N. (1984). Academic and social self-concepts of gifted, general, and special students. *Exceptional Children,* 50, 551-554.

Keys, N. (1938). The underage student in high school and college. *University of California Publications in Education,* **7**, 145-271.

Klein, A.G., & Zehms, D. (1996). Self-concept and gifted girls: A cross sectional study of intellectually gifted females in grades 3, 5, 8. *Roeper Review,* 19, 30-34.

Kolloff, P., & Moore, A. (1989). Effects of summer programs on the self-concept of gifted children. *Journal for the Education of the Gifted*, 12, 268-276

Krippendorp, K. (2004). *Content Analysis: An Introduction to its Methodology.* Thousand Oaks, CA: Sage.

Kulik, J.A. (1992). *An analysis of the research on ability grouping: Historical and contemporary perspectives.* Storrs: University of Connecticut.

Kulik, J.A. (2003) Grouping and Tracking. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 268-281) Boston: Allyn & Bacon.

Kulik, J.A., & Kulik, C.C. (1984). Effects of accelerated instruction on students. *Review of Educational Research*, **54** (3), 409-425

Lawrence G.D. (1982) *People, types and tiger stripes.* Gainesville, FL: Center for Applications of Psychological Type.

LeCompte, M., & Preissle, J. (1993). *Ethnography and Qualitative Design in Educational Research.* London: Academic Press.

Lincoln, Y.S., & Guba, E.G. (1985). *Naturalistic Inquiry.* Bevrly Hills, CA: Sage.

MacDaid,G., McCaulley, M., & Kainz, R. (1986). *Atlas of type tables.* Pan Alto, CA: Consulting Psychologists Press.

MacRae, L., & Lupart, J. L. (1991). Issues in identifying gifted students: How Renzulli's model stacks up. *Roeper Review*, 14, 53-58.

Maxcy, S. (2003). Pragmatic threads in mixed methods research in the social sciences: The search for multiple modes of inquiry and the end of the philosophy of formalism. In A. Tashakorri & C. Teddlie (Eds.) *Handbook of mixed methods in social & behavioral research* (pp. 51-90). Thousand Oaks, CA: Sage.

Maker, C.J. (1982). *Curriculum development for the gifted*. Rockville MD: Aspen Systems Corporation.

Marland, S.P. (1972). *Education of the gifted and talented: Report to the Congress of the United States by the US Commissioner of Education*. Washington, DC: US Government Publishing Office.

Marsh, H.W., & Parker, J.W. (1984. Determinants of student self-concept: Is it better to be a relatively large fish in a small pond even if you don't learn to swim as well? *Journal of Personality and Social Psychology* 47, 213-231.

Mason, J. (2006). *Qualitative Researching* (Second edition). London: Sage

Matthews, M.S. (2008). Talent Search Programs. In J.A. Plucker & C.A. Callahan (Eds) *Critical Issues and Practices in Gifted Education.* pp 641-655 Waco, Texas: Prufrock Press.

Matthews, D. J., Foster, J. F.(2005) *Being Smart about Gifted Children: A Guidebook for Parents and Educators*, Great Potential Press, Inc., Scottsdale, Arizona

May, D.C. (1971). *An investigation of the relationship between selected personality characteristics of eighth-grade students and their achievement in Mathematics*. Doctoral dissertation, University of Florida.

McCaulley, M.H. (1978). Application of the Myers-Briggs Type Indicator to medicine and other health professions. Gainesville, FL: Center for Applications of Psychological Type.

McCaulley, M.H., & Natter, F.L. (1974). Psychological type differences in education. In F.L. Natter & S.A. Rollin *(Eds.) The Governor's task force on disruptive youth.* Tallahassee, FL: Office of the Governor.

McCutcheon, J.W., Schmidt, C.P., & Bolden, S.H. (1991). Relationships among selected personality variables, academic achievement and student teaching behavior. *Journal of research and development in education*, **24** (3) 38-44.

McLeod, J, & Cropley, A.J. (1989). *Fostering academic excellence*. Oxford: Pergamon Press.

Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education*. San Francisco: Jossey-Bass.

Milgram, R.M., & Milgram, N.A. (1976). Personality characteristics of gifted Israeli children. *The Journal of Genetic Psychology,* 129, 185-194.

Mills, C.J. (1983). *Personality characteristics of the gifted adolescents and their parents: Comparisons and implications for counselling* . Paper presented at the annual meeting of the American Educational Research Association, Montreal.

Mills, C.J. (1984). *Sex differences in self-concept and self-estem for mathematically precocious adolescents.* Paper presented at the annual meeting of the American Educational Research Association, New Orleans.

Mills, C.Y., & Durden, W.G. (1992). Co-operative learning and ability grouping: An issue of choice. *Gifted Child Quarterly*, 36 (1), 11 - 16.

Monks, F.J. & Mason, E.J. (2000). Developmental Psychology and Giftedness: Theories and research. *In* K.A. Heller, F.J. Monks, R.J. Sternberg & R.F. Subotnik(Eds.) *The International Handbook of Research on Giftedness and Talent*, (2nd edition) pp. 141-157. Oxford: Pergamon Press.

Monks, F. J., & Katzko, M.W. (2005). Giftedness and Gifted Education *In* R.J. Sternberg & J.E. Davidson (Eds.) *Conceptions of Giftedness* pp. 187-201. New York: Cambridge University Press.

Moon, S.M. (1995). The effects of an enrichment program on the families of participants: A multiple case study. *Gifted Child Quarterly*, 39, 198-208.

Moon, S.M., & Feldhusen, J.F. (1994). The program for academic and creative enrichment (PACE): A follow up study ten years later. In R.F. Subotnik & K. Arnold (Eds) *Beyond Terman: Contemporary longitudinal studies of giftedness and talent.* pp 375-400 Norwood, NJ: Ablex

Moon, S.M., Feldhusen, J.F. & Dillon, D.R. (1994). Long term effects of an enrichment program based on the Purdue Three Stage Model. *Gifted Child Quarterly*, 38 (1) 38-48.

Moon, S.M., & Nelson, T.S., & Piercy, F.P. (1993). Family Therapy with a Highly Gifted Adolescent. *Journal of Family Psychotherapy,* 4 (3), 1-16.

Moon, S.M. & Roselli, H.C. (2000). Developing Gifted Programs. *In* K.A. Heller, F.J. Monks, R.J. Sternberg & R.F. Subotnik(Eds.) *The International Handbook of Research on Giftedness and Talent*, (2nd edition) pp. 499-521. Oxford: Pergamon Press

Morgan, M.K. (1975). *The MBTI, Holland's VPI, the GATB and other measures of academic aptitude*. Gainesville, FL. Center for Allied Health Instructional Personnel

Myers, I.B. (1980). *Introduction to type*, 3rd edition. Palo Alto, CA: Consulting Psychologists' Press.

Myers, I.B. & McCaulley, M.H. (1985). *Manual: A guide to the development and use of the Myers-Briggs Type Indicator*. Palo Alto, CA: Consulting Psychologists' Press.

NCCA (2007). *Exceptionally able students: Draft Guidelines for Teachers*. Dublin: NCCA publications

Neber, H. & Heller, K. (2002). Evaluation of a summer school program for highly gifted secondary-school students: The German Pupils Academy. *European Journal of Psychological Assessment,* 18, 214-228.

Oakes, J. (1985). *Keeping track: How schools structure inequality.* New haven, CT: Yale University Press.

Olszewski, P., Kulieke, M., & Willis, G. (1987). Changes in the self-perceptions of gifted students who participate in rigorous academic programs. *Journal for the Education of the Gifted*, **X**, 287-303

Olszewski-Kubilius, P. (1989). Development of academic talent: The role of summer programmes. *In* J.L. Van Tassel-Baska & P. Olszewski-Kubilius, (Eds.). *Patterns of influence on gifted learners. The home, the self and the school* (pp. 421-430). New York & London: Teachers' College Press.

Olszewski-Kubilius, P. (1997). Special summer and Saturday programs for gifted students. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (2nd Ed. pp. 180-188) Boston: Allyn & Bacon.

Olszewski-Kubilius, P. (1998). Research evidence regarding the validity and effects of talent search educational programs. *Journal for Secondary Gifted Education,* 9, 106-113.

Olszewski-Kubilius, P. (2003). Special summer and Saturday programs for gifted students. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 163-173) Boston: Allyn & Bacon.

Olszewski-Kubilius, & P., Grant, B. (1996). Academically talented females in mathematics: The role of special programs an support from others in acceleration, achievement and aspiration. In K.D. Noble and R.F. Subotnik (Eds) *Remarkable Women: Perspectives on female talent development* (pp. 281-291) Cresskill, NY: Hampton Press.

Olszewski-Kubilius, P., Grant, B. & Seibert, C. (1993). Social support systems and the disadvantaged gifted: A framework for developing programs and services. *Roeper Review*, 14, (4) 198-201.

Olszewski-Kubilius, P. & Kulieke, M.J. (1989). Personality dimensions of gifted adolescents: A review of the empirical literature. *Gifted Child Quarterly*, 32, 347-352.

Olszewski-Kubilius, P. & Lee, S.Y. (2004). Parent perceptions of the effects of the Saturday Enrichment Program on gifted students talent development. *Roeper Review*, 26, (3) 156-165.

Olszewski-Kubilius, P. & Yasumoto, J. (1995). Factors affecting the academic choices of academically talented middle school students. *Journal for the Education of the Gifted,* 18 (3) 298-318.

O'Reilly, C. (2004). *Learning Styles of Gifted and Non Gifted Students.* Paper presented at European Council for High Ability conference, Pamplona.

Parker, J.P. (1998). The Torrance creative scholar program. *Roeper Review,* 21, 32-35.

Parker, W.D., & Mills, C.A. (1998). Cognitive-psychological profiles of gifted adolescents from Ireland an the US: Cross-societal comparisons. *International Journal of Intercultural Relations,* 22, 1-16

Passow, A.H. (1958). Enrichment of education for the gifted. *In* N.B. Henry (Ed.) *Education for the gifted: Fifty-seventh yearbook of the National Society for the Study of Education*, Part 1(pp. 193-221). Chicago: University of Chicago Press.

Passow, A.H., & Frasier, M.M. (1996). Toward improving identification of talent potential among minority and disadvantaged students. *Roeper Review* 18 (3) 198-202

Patton, M.Q. (1980). *Qualitiative Evaluation Methods.* London: Sage.

Patton, M.Q. (1990). *Qualitiative Evaluation and Research Methods.* London: Sage.

Paul, K.M, & Plucker, J.A. (2004). Two steps forward, one step back: Effect size reporting in gifted education research from 1995-2000. *Roeper Review,* 26, (2), 68-72.

Piers, E. (1984). *Piers-Harris children's self concept scale: Revised Manual 1984.* Los Angeles CA: Western Psychological Services.

Pittenger, D.L. (1993) The utility of the Myers-Briggs Type Indicator. *Review of educational research*, Vol. 63 No. 4 467-488.

Popkewitz, T.S.(1984) - *Paradigm and Ideology in Educational Research: The Social Functions of the Intellectual.* London and New York: Falmer Press

Pressey, S.L. (1949). *Educational acceleration: Appraisal of basic problems.* Bureau of Educational Research Monographs, No. 31. Columbus: Ohio State University Press.

Redding, R.E. (1989). Underachievement in the verbally gifted: Implications for pedagogy. *Psychology in the schools*, **26**, 275-288.

Renzulli, J.S. (1978). What makes giftedness? *Phi Delta Kappan* 60, 180-184.

Renzulli, J.S. (1979). *In* W.C. George, S.J. Cohn, J.C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 190-191) Baltimore, MD: The Johns Hopkins University Press.

Renzulli, J.S. (1987). The positive side of pull out programs. *Journal for the Education of the Gifted,* 10 245-254.

Renzulli, J.S. (2005). The Three-Ring-Conception of Giftedness: A developmental Model for Promoting Creative Productivity *In* R.J. Sternberg & J.E. Davidson (Eds.) *Conceptions of Giftedness* pp. 246-280. New York: Cambridge University Press.

Renzulli, J.S. ,& Reis , S.M. (1994). Research related to the Schoolwide Enrichment Triad Model. *Gifted Child quarterly,* 38 (1), 7-20.

Renzulli, J.S. & Reis, S.M. (1997). *The schoolwide enrichment model: A how to guide for academic excellence.* (2nd Ed) Mansfield Center, CT: Creative Learning.

Rimm, S. (1991) Underachievement and superachievement: Flip sides of the same psychological coin. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (2nd Ed. pp. 416-434) Boston: Allyn & Bacon.

Rinn, A.N. (2005). Trends among honors college students: An anlysis by year in school. *Journal of Secondary Gifted Education,* 16, 157-167.

Rinn, A.N. (2006). Effects of a summer program on the social self-concepts of gifted adolescents. *Journal of Secondary Gifted Education,* 17 (2), 65-75.

Robinson, A. (1990). Cooperation or exploitation? The argument against cooperative learning for talented students. *Journal for the Education of the Gifted,* 14 (1), 9-27.

Robinson, N.M. (1999). Necessity is the mother of invention: The roots of our 'system' for providing educational alternatives for gifted students. *Journal of Secondary Gifted Education*, 10, (3), 120-128.

Robinson, N.M., & Robinson, H.B. (1982). The optimal match: Devising the best compromises for the highly gifted student. In D. Feldman (Ed.), *New directions for child development: Developmental approaches to giftedness and creativity*. San Francisco: Jossey-Bass.

Robinson, N.M., Zigler, E., & Gallagher, J. (2000) Two tails of the normal curve: Similarities and differences in the study of mental retardation and giftedness. *American Psychologist* 55, 1413-1424.

Robson, C. (2002). *Real World Research*(2nd edition). Oxford: Blackwell.

Roe, A. (1983). Early background and eminent scientists. In R.S. Albert (Ed.) *Genius and eminence* pp 170-181. New York: Pergamon.

Rogers, K.B. (1991). *The relationship of grouping practices to the education of the gifted and talented learner: Research-based decision making series.* Storrs, CT: National Research Center on the Gifted and Talented.

Ross, J. (1963). *The relationship between the Myers-Briggs Type Indicator and ability, personality and information tests.* Princeton, NJ: Educational Testing Services.

Rossman, G.B., & Wilson, B.L. (1985). Numbers and Words: Combining quantitative and qualitative methods in a large scale evaluation study. *Evaluation Review,* 9 (5), 627-643.

Ross, J. (1963). *The relationship between the Myers-Briggs Type Indicator and ability, personality and information tests.* Princeton, NJ: Educational Testing Services.

Rotigel, J.V., & Lupkowski-Shoplik, A. (1999). Using talent searches to identify and meet the educational needs of mathematically talented youngsters. *School Science and Mathematics*, 99 (6), 330-337.

Sak, U. (2004). A synthesis of research on psychological type of gifted adolescents. *Journal of Secondary Gifted Education,* 15, 70-79.

Sapon-Shevin, M. (1989). *The effects of gifted programs on regular classroom teachers: If t takes a special person to work with these kids, then what are we?.* Paper presented at the Annual meeting of the educational Research association, San Francisco.

Sapon-Shevin, M. (1994). Playing favorites: *Gifted education and the disruption of community*. Albany, NY: State University of New York Press.

Sarantakos, S. (2005). *Social research* (3rd Ed). New York : Palgrave Macmillan.

Sayler, M.F. & Brookshire, W.K. (1993). Social, emotional, and behavioural adjustment of accelerated students, students in gifted classes, and regular students in eighth grade. *Gifted Child Quarterly, 37* (4), 150-154.

Schneider, B.H., Clegg, M.R., Byrne, B.M., Ledingham, J.E., & Crombie, G. (1989). Social Relations of gifted children as a function of age and school program. *Journal of Educational Psychology,* 81, 48-56.

Schiever, S.W. & Maker, C.J. (2003) New Directions in Enrichment and Acceleration. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 163-173) Boston: Allyn & Bacon.

Sears, P.S. (1979). The Terman genetic studies of genius, 1922-1972. In A.H. Passow (Ed.) *the gifted and the talented* (pp. 75-96) Chicago: National society for the Study of Education.

Shavelson, R.J., Hubner, J.J., & Stanton, G.C. (1976). Self-Concept: Validation of construct interpretations. *Review of Educational Research,* 46, 407-441.

Silverman, L.S. (1997). The construct of asynchrony. *Peabody Journal of Education,* 72, 36-58.

Sisk, D. (1988). The bored and disinterested gifted child: Going through school lockstep. *Journal for the Education of the Gifted,* 11 (4)*,* 5-19

Southern, W.T., Jones, E.D., & Stanley, J.C. (1993). Acceleration and enrichment: The context and development of program options. *In* K.A. Heller, F.J. Monks & A.H. Passow (Eds.) *The International Handbook of Research on Giftedness and Talent*, pp. 387-411. Oxford: Pergamon Press

Spearman, C *(1904)*. "General intelligence", objectively determined and measured*. American Journal of Psychology,* **15**, 201-293.

Stallings, J. (1985). School classroom and home influences on women's decisions to enrol in advanced mathematics courses**.** *In* S.F. Chipman & D.M. Wilson (Eds) *Women and Mathematics: Balancing the equations* (pp. 199-223) Hillsdale, NJ: Erlbaum.

Stanley, J.C. (1976). Identifying and nurturing the intellectually gifted. *Phi Delta Kappa*, **58**, 234-237.

Stanley, J.C. (1978). Educational non-acceleration: An international tragedy. *Gifted Child Today* **1** (3), 54-57

Stanley, J.C. (1979). Identifying and nurturing the intellectually gifted**.** *In* W.C. George, S.J. Cohn, J.C. Stanley (Eds.), *Educating the gifted: Acceleration and enrichment* (pp. 172-180) Baltimore, MD: The Johns Hopkins University Press.

Stanley, J.C. (1991). Reflections on my life and how it grew. In D.L. Burleson (Ed.), *Reflections: Personal essays by thirty-three distinguished educators* (pp. 340-355). Bloomington IN: Phi Delta Kappa Educational Foundation.

Stanley, J.C.. (1991). A better model for residential high schools for talented youth. *Phi Delta Kappan* 72, 471-473.

Sternberg, R.J. (1985). *Beyond IQ.* New York: Cambridge University Press.

Sternberg, R.J. (1993). Procedure for identifying intellectual potential in the gifted: A perspective on alternative "metaphors of mind". *In* K.A. Heller, F.J. Monks & A.H. Passow (Eds.) *The International Handbook of Research on Giftedness and Talent*, pp. 185-209. Oxford: Pergamon Press.

Sternberg, R.J. (2000). Patterns of Giftedness: A Triarchic Analysis. *Roeper Review,* Vol. 22, (4) 231-235

Swiatek, M.A. (2007). The Talent Search Model: Past, Present, and Future. *Gifted Child Quarterly,* 51, 320-329.

Swiatek, M.A., & Cross, T.L.(2007). Construct validity of the Social Coping Questionnaire. *Journal for the Education of the Gifted* 30 (4), 427-449.

Swiatek, M.A. & Lupkowski-Shoplik, A. (2003). Elementary and middle school participation in gifted programs: Are gifted students underserved? *Gifted Child Quarterly*, 47, 118-130

Tangherlini, A.E. & Durden, W.G. (1993). *Smart kids: How academic talents are developed in America.* Geneva: Hogrefe & Huber.

Tannenbaum, A.J. (1983). Gifted children: Psychological and educational perspectives. New York: Macmillan.

Tannenbaum, A.J. (1986). Giftedness: A psychosocial approach *In* R.J. Sternberg & J.E. Davidson (Eds.) *Conceptions of Giftedness* pp. 21-52. New York: Cambridge University Press.

Tashakkori, A. & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches.* Thousand Oaks, CA: Sage

Tashakkori, A., & Teddlie, C. (2003). Major issues and controversies in the use of mixed methods in the social and behavioral sciences. In A. Tashakorri & C. Teddlie (Eds.), *Handbook of mixed methods in social & behavioral research* (pp. 3-50). Thousand Oaks, CA: Sage.

Terman, L.M. (1925). *Genetic studies of genius: Volume 1. Mental and physical traits of a thousand gifted children.* Stanford CA: Stanford University Press.

Terman, L.M. (1954). The discovery and encouragement of exceptional talent. *American Psychologist,* 9, 221-230

Thompson, M. (2001). *Developing verbal talent.* Evanston, Il: Northwestern University.

Thompson, B., & Borello, G.M. (1986). Second-order factor structure of the MBTI: A construct validity assessment. *Measurement and evaluation in counselling and development*, **18** 148-153.

Tidwell, R. (1980). A psycho-educational profile of 1593 gifted high school students. *Gifted Child Quarterly,* 24, 63-68.

Tirri, K & Uusikyla, K. (1994). How teachers perceive differentiation of education among the gifted and talented. *Gifted Education International*, 9, (2), 69-73.

Tong, J., & Yewchuk, C. (1996). Self-Concept and Sex-Role Orientation in Gifted High School Students. *Gifted Child Quarterly* 40, (1), 15-23

Valle, R. & King, M. (1978). An introduction to existential-phenomenological thought in psychology. In R.Valle & M. King (Eds.). *Existential-phenomenological alternatives for psychology,* pp 6-17. New York: Oxford University Press.

Van, B. (1992). The MBTI: Implications for retention. *Journal of developmental education*, **16** (1) 20-25.

Van Tassel-Baska, J. (1983). Statewide replication in Illonois of the Johns Hopkins Study of Mathematically Precocious Youth. In C.P. Benbow & J.C. Stanley (Eds)**,** *Academic precocity: Aspects of its development.* Pp 179-191 Baltimore, MD: The Johns Hopkins University Press.

VanTassel-Baska, J. (1987). The ineffctiveness of the pull out program model in gifted education: A Minority perspective. *Journal for the Education of the Gifted,* 10 255-264.

Van Tassel-Baska, J. (1989). Profiles of precocity: A three year study of talented adolescents. *In* J.L. Van Tassel-Baska & P. Olszewski-Kubilius, (Eds.). *Patterns of influence on gifted learners. The home, the self and the school* (pp. 29-39). New York & London: Teachers' College Press.

Van Tassel-Baska, J. (2003). What Matters in Curriculum for Gifted Learners: Reflections on Theory, Research and Practice. In N. Colangelo and G. Davis (Eds.) *The handbook of gifted education* (3rd ed.; pp. 174-183). Boston: Allyn & Bacon.

Van Tassel-Baska, J. (2005). Domain-Specific Giftedness: Applications in School and Life *In* R.J. Sternberg & J.E. Davidson (Eds.) *Conceptions of Giftedness* pp. 358-377. New York: Cambridge University Press.

VanTassel-Baska, J., **Landau, M. & Olszewski, P.** (1984). The benefits of summer programming for gifted adolescents. *Journal for the Education of the Gifted,* 13 (1) 73-82.

Van Tassel-Baska, J., Landau, M., & Olszewski, P. (1985). Towards development of an appropriate math/science curriculum for the gifted learner. *Journal for the Education of the Gifted*, **VIII**, 257-272

Vaughan, V.L., Feldhusen, J.F., & Asher, J.W. (1991). Meta-analyses and review of research on pull out programs in gifted education. *Gifted Child Quarterly*, 35, 92-105.
Von Wright, G. H. (1971). *Explanation and Understanding.* London: Routledge
Wilder, G & Casserly, P.L. (1988). *Survey 1: Young Sat takers and their parents..* New York: College Board Report.

Williams, R. (1992). Personality characteristics of talented and gifted students as measured by the Myers-Briggs Type Indicator and Murphy-Meisgeir Type Indicator for children. *Dissertation Abstracts International,* 53. 111.
White, D.A. (1999). Gifted Education: The event and advent of theory. *Gifted Child Today*, 22 (6), 60-65.
Yong, F.L., & McIntyre, J.D. (1991). Comparison of self-concepts of students identified as gifted and regular students. *Perceptual and Motor Skills,* 73, 443-446.

Appendix A: CTYI Course Descriptions

Course Descriptions 2008 Spring Saturday Classes 8-13 years

Archaeology

This course will detail the work of the Archaeologist and many of the fascinating studies which are undertaken to unravel the secrets of the past. The course will include elements of both Celtic and pre-Celtic periods in Ireland. This course is suitable for both new students and students who have previously taken CTYI archaeology courses.

Architecture

Architecture is the science and art of designing structures. Whether it's a house, cathedral, theatre or shopping centre, architecture draws together needs, space and materials and converts it into size, shape and detail. On this course you will learn how to design and plan, translating
your inspirations into solid structures.

Art Design

All around us we are surrounded by man-made goods including clothes, jewellery, school bags, mobile phones, furniture, cutlery and much more. The class will be highly practical in nature with students choosing a different element of design to work on each week and producing their own designs on such objects as necklaces, toothbrushes, cups, shoes and more.

Astronomy

This course will explore the universe, starting from our nearest neighbours in the Solar System, moving through our galaxy the Milky Way and beyond, to the furthest reaches of the universe via intergalactic space, black holes and quasars. Some of the questions which we hope to pose and answer include - Is there life on other planets? How does a rocket work? What can we see for ourselves through a telescope?

Chemistry

This is a practical lab based course. Students will have the opportunity to explore a range of experimental elements of chemistry from basics such as solutions and mixtures to the speed of reactions and the structure of chemical bonds.

Chemistry [8,9,10 Year Olds]

This is a practical lab based course suitable for 8- 10 year olds. Students will have the opportunity to explore a range of experimental elements of chemistry from basics such as solutions and mixtures to the speed of reactions and the structure of chemical bonds.

Chemistry [11,12,13 Year Olds]

This is a practical lab based course suitable for 11-13 year olds. Students will have the opportunity to explore a range of experimental elements of chemistry from basics such as solutions and mixtures to the speed of reactions and the structure of chemical bonds.

Computer Applications

This is a problem solving class. Students will be taught the fundamentals of programming with a special emphasis on graphics. There are several levels available depending on the previous experience of the student.

Creative Thinking

This course will teach you thinking skills like never before! Presenting to you everyday problems you'll be challenged to explore new ideas and generate numerous possible solutions. It's not about finding the right answer – it's learning to search for many right answers. Creative thinking is about cultivating an attitude. It's about developing, re-inventing, changing and combining your ideas to arrive at wonderfully complex new approach or just a brilliantly simple solution.

Creative Writing

This course will look at various aspects of creative writing. Students will be encouraged to write various pieces of work following a series of creative exercises. A very practical course it is ideal for all writing enthusiasts.

Debating [8, 9, 10 Year olds]

This course is an introduction to debating for 8, 9, and 10 year olds. This course will teach you the fine art of debating. There will be a lot of practical work on this course including researching and presenting your topic of interest. There will be fun debates and the course will be useful for anyone interested in public speaking even if they haven't tried it before.

Debating [11,12, 13 Year olds]

Hone your public speaking abilities this term with a course in debating. This course will teach you everything from how to begin researching your topic, how to construct a good argument, how to spot bad argumentation, to the fine art of rebuttal. It will teach you about how to debate as part of a team, debating etiquette and how to adapt to judges and audiences. To successfully develop all of these skills, this exciting course will have a strong emphasis on practice, enabling all participants to practice what they preach!

Drama

The main areas covered in this class include improvisation, storytelling, mime and principles of Stage Practice. These areas will be explored through both individual and group performance exercises. Each class will take the form of a drama workshop, starting with games to encourage a sense of fun and creativity, and leading on to acting exercises. Verbal and physical warm–ups will be used weekly, in order to establish concentration.

Electronics

Electronics is the field of engineering which covers the study of electric current and the technology which uses it. This course will introduce students to some of the fundamentals of electronics such as voltage, currents, amplifiers and in the digital area to flip-flops and computer memory. Students will have the opportunity to explore the central role that electronics plays in today's society from tv, videos, dvds and personal computers to telecommunications such as radio and satellites.

Engineering

This course aims to introduce students to some of the core principles underlying the study of engineering. Engineers are important in many things that shape the world around us such as computer chips, rocket science and advanced technology. There will be a practical element to this course, with students constructing their own bridges and looking at engineering in everyday life.

Engineering [8,9,10 Year Olds]

This course suitable for 8-13 year olds aims to introduce students to some of the core principles underlying the study of engineering. Engineers are important in many things that shape the world around us such as computer chips, rocket science and advanced technology. There will be a practical element to this course, with students constructing their own bridges and looking at engineering in everyday life.

Engineering [11,12,13 Year Olds]

This course suitable for 11-13 year olds aims to introduce students to some of the core principles underlying the study of engineering. Engineers are important in many things that shape the world around us such as computer chips, rocket science and advanced technology. There will be a practical element to this course, with students constructing their own bridges and looking at engineering in everyday life.

Folklore

This course deals with Irish supernatural figures such as the banshee, fairies, ghosts, witches, and magical creatures like the Leprechaun. Mythical beasts from world folklore (e.g., dragons and unicorns) and animal lore will also be explored. Special days in the Irish calendar (e.g., Halloween) will also be examined.

Forensic Science

This exciting course will give students the chance to study forensics. Students will get the chance to solve a forensic mystery and also to explore various aspects of physical science.

Imaginative Writing

This course will look at various aspects of creative writing. Students will be encouraged to write various pieces of work following a series of creative exercises. A very practical course it is ideal for all writing enthusiasts.

Investigative Science

This course is an introduction to aspects of experimental science in the areas of chemistry and biology. Topics covered will include areas such as chemical reactions, atomic and molecular bonds and cell structures in living organisms. There will be an emphasis on practical lab work and good scientific method.

Journalism

This course will explore the different styles of writing appropriate to various areas of the media, e.g. news reporting, sports journalism and reviews. It aims to help students to write factually and succinctly.

Legal Studies

This course will provide an introduction to the legal system in Ireland and includes areas such as Tort Law and criminal justice system. This is a highly discursive class and students will have the opportunity to take part in mock trials.

Marine Biology

Discover the secrets of the Seven Seas and beyond. Students learn about the classification of marine environments and organisms, from the deep sea bed to tropical coral reefs; from microscopic plankton to the great marine mammals and birds. Also covered are topics such as oceanography, fisheries, sampling techniques and marine conservation.

Mathematical Magic

This course looks at relationships and connections between numbers. It is strongly problem based with students working collectively and individually on problems, including areas such as indices, probability, series and sequences.

Mechanical Engineering

This exciting course will introduce students to the design process, touching on some of the cutting edge research in the area. Students will learn about engineering and drafting, mechanics, strength and failure of materials, and learn about the use of computer aided drawing and design (CAD). This course will have many practical, hands-on aspects, including design of their own machines and will give students an insight into what a career as a mechanical engineer might be like.

Medicine

This exciting course will bring the student on a fascinating journey of human health. It will cover both ways to keep you healthy such as nutrition, exercise and laughter! and it will also explain how modern medicine can help people recover from illness - from first-aid to hospital care. The course will trace the evolution of medicine from ancient times (where electric eels were used to numb patients!) to the present day where high tech diagnostic equipment (MRI / X-rays) allow doctors to help even more people than before. Discover how your heart beats, how your muscles move, what headaches are and how Aspirin makes pain disappear.

Model United Nations

Famine, disaster, war, epidemic and the environment; at the Model United Nations you will learn much about world politics through real life situations. Learning the skills of debate and negotiation, you will put forward your case for your country. Discuss, confer, bargain, agree, collaborate and cooperate with other countries. This is real world politics and every decision will have immense consequences for good and for bad! This course will suit students who have an interest in debating and are concerned with world justice and fairness.

Physics
Students of this course will be introduced to principles of physics and their use in everyday life.   The most fundamental science, physics is responsible for much of the technology that surrounds us everyday – CD players, video players, computers, telephone lines, X-rays, magnetic resonance imaging (MRI scans), radio-therapy and microwaves.

Science of Tomorrow

This exciting course explores the amazing world of futuristic science and biotechnology. Ever wondered what it would be like to be cloned? How to use stem cells to grow a new arm? How is food genetically modified and does it taste different? How we can use DNA to treat diseases? Ever thought about how infectious disease are spread or how many different types of bacteria are on your shoe? If you are interested in finding out the answers to these questions this course will cover all these topics and many more. Course will contain laboratory work.

Sports Science
Did you know that without their physiotherapists many leading sports stars and teams (such as Munster), wouldn't be as successful? This is because good physiotherapy ensures that injuries heal well and fast and can even prevent them happening in the first place! Study the anatomy of the human body and see how an athlete's body differs. Come to the class and learn why golfers such as Tiger Woods use computer simulations to analyse their golf swing; rugby players like Ronan O'Gara study how the projectile path of the rugby ball can ensure a successful conversion over the posts in rugby; and 'Nike' use technology to design what they think is the perfect football boot.

Strategy Games

A strategy game is a game in which the player's decision-making skills have a high significance in determining the outcome. This course will look at different strategy games and will give students a chance to improve their thinking skills and play some fun games as well.

Veterinary Science

Have you ever wondered what a day in the life of a vet would be like? Find out in this exciting course! The anatomy and physiology of different animals will be looked at, as well as common ailments and treatments. The running of a veterinary surgery will be explained and the roles of vets in some exotic locations with even more exotic patients will be discussed!

Wildlife

Are there snakes in Ireland? Does Funghi the dolphin really enjoy the company of humans? Come explore the creatures on our shore from marine life off the coast of Dublin to the creatures that lurk deep in our forests and high in the hills! Then take a safari to hear about more exotic animals and their habitats in other countries. (Khaki shorts and Richard Attenborough not provided!).

13-16 yr old Course Descriptions

1. Astronomy

Available Session 2 ONLY
Code AST2
This course is a scientific exploration of the human place in the universe. Astronomy is possibly the most fundamental of all sciences as it seeks to explore both the roots of the Universe and its ultimate fate through the disciplines of Physics and Mathematics. We study the origin and history of the Universe and the formation of the Earth and the solar system. We will look at the birth of stars such as our own Sun, the life cycle of stars and their final destination as white dwarfs, pulsars or black holes, the structure of our home galaxy the Milky Way and some speculation about the first and final minutes of our Universe. We compare the Earth's properties with those of the other planets and explore how the heavens have influenced human thought and action. This course includes study of the properties of light and matter and the tools astronomers use to measure radiation from celestial sources. The course also covers exciting contemporary topics such as black holes, the expansion of the universe and the search for extraterrestrial life.

Students will get the chance to do a research project in their own chosen area of astronomy and will get access to the university library and Internet for the duration of the course.

2. Biomedical Diagnostics

Available Session 1 ONLY
Code: BD1

(in co-operation with)

Biomedical diagnostics refers to the science and technology which aids the screening, detection, diagnosis and monitoring of human disease.

This course will be run in collaboration with the Biomedical Diagnostics Institute (BDI) at DCU. At the BDI, research is carried out into the development of miniaturised diagnostic devices that detect early markers of disease such as cancer, heart disease and diabetes.

Initially, students will be introduced to the area of diagnostics through fundamental biology, chemistry and physics courses dealing with general principles central to biomedical diagnostics.

In subsequent weeks, students will cover areas such as immunology & immunoanalysis, biophotonics and genetics. An insight will be provided into cutting-edge concepts and technologies in the medical diagnostic field. Furthermore, students will be introduced to the ethical impact of medical diagnostics for society.

This course will include a mixture of theory and intensive laboratory practicals. A visit to the BDI research laboratories and lectures from Principal Investigators in the BDI will also form part of this course.

3. Computer Applications

Available Session 2 only
Code: CA2
This course introduces the concept of problem solving. The course begins with a brief introduction to computers and programming. The programming language that will be studied as part of this course will be Java. Well-structured programming techniques are discussed through a number of examples and student exercises. General programming problems such as Sorting and Searching are addressed, in addition to tackling infamous problems e.g. `The Travelling Salesman' and the `Eight Queen Problem'.

Each student will undertake a project. Projects are usually completed on an individual basis and allow the student to understand and develop concepts discussed in class at their own pace while working on a suitable problem which they find intriguing. Previous projects have included: programming such games as `Connect 4', `Xs and Os', Text-graphic adventures, and also programmes to break codes.

4. Criminology

Code: CRIM1
Available: Session 1 Only

What is crime? Who commits crime? Why do people commit crime? How is crime dealt with? Criminology is the scientific study of the nature, extent, causes, and control of criminal behaviour in both the individual and in society. This course will delve into many areas in an attempt to explain crime and criminal behaviour.

The course will start by assessing the different theoretical perspectives which attempt to offer a scientific study of 'crime' and the 'criminal', from classical to contemporary theories. We then take a more practical approach, reviewing topical criminal justice issues in Ireland and elsewhere such as crime rates, media and crime, policing, poverty and sentencing policies. We conclude with an overview of studies in penology and penalty, theories of the prison and of alternatives to imprisonment. There is also normally the option to visit the Four Courts and Mountjoy Prison.

5. Engineering

(in co-operation with) **RPS Group Plc**

Available: Session 1 ONLY
Code: ENG1

In reality, without engineers, the world would fall down around our ears. Yet, most of their work goes largely unnoticed. If we examine the world around us, practically everything man-made that we can see, an engineer has been involved in it.

This course introduces the basics of the various fields of engineering. The class will work on developing the problem solving and communication skills that are essential for a career in Engineering. We are faced with basic needs in everyday life. It is these needs and providing for them that fuels the problems for which engineers must provide solutions in the most efficient, socially aware, aesthetic and cost effective manner. Civil Engineering: buildings and roads, Mechanical Engineering: machinery and manufacturing, Electronic Engineering: circuits and robotics, Computer Engineering: programming and hardware. As the Engineering umbrella covers so many areas, this should prove to be a demanding, interesting, challenging and extremely enjoyable course.

6. Experimental Physics

Available: Session 1 ONLY
Code: EXP1

From Quantum Mechanics to Cosmology - Physics explains everything that surrounds us, from the minute to the massive. This course will give students a hands-on opportunity to explore the key constituents of Physics including light, sound, mechanics, electricity and magnetism, as well as delving into the cutting-edge technology that will see physicists worldwide unite to attempt the unification of the fundamental forces of nature and the creation of the solution to the world's energy crisis - harnessing the Sun's fusion processes here on Earth. The course will provide materials for further investigations and include time outside the classroom environment to utilise DCU's fantastic physics lab facilities. From music on fire to the fourth state of matter - Experimental Physics will take its participants on a roller-coaster ride through the limitless possibilities of the bedrock of all sciences!

7. Film Studies

Available: Session 1 only
Code: FS1
This course is designed to introduce students to the language of cinema. It explores a wide range of subjects including how film scripts work, the uses of cinematography, editing and special effects, what a national cinema is, the history of the motion picture, the development of different genres of film, how audiences make meaning from films, and more. The course is designed to give students a theoretical grounding in the issues that make film such an important part of our cultural lives, and to help them to develop a greater critical awareness of how the cinema speaks to us.

Please note: this is a theoretical, not practical, film studies course.

8. Game Theory
Available: Session 2ONLY
Code: GT2

Game theory is the study of strategic interactions. This course is about asking what happens when people or things with different incentives or motivations interact against one another to achieve their own best outcome. It has become the underpinning of evolutionary theory, economics, business processes, international relations and is the subject of major motion pictures, like 'A Beautiful Mind'. In this course we will discover the laws underpinning every game and study specific examples of different types of games taken using examples from literature, the movies, board games, economics, molecular biology, international politics, business studies, dating, game shows, government funding opportunities and, of all things, fuel injection mechanisms in cars and the songs of the Dunes in the Sahel. Students will learn to develop their own games and study the development of others. No mathematical knowledge is needed to take the course, all concepts will be developed as we go in a fun and intuitive way, focusing on the ideas and their implications rather than the technical aspects of the theory. Students who care about understanding their world should enjoy this course.

9. Heritage Studies   (in co-operation with)
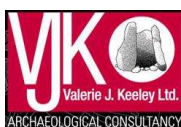
Available: Session 1 ONLY
Code: HS1

Ireland is internationally famed for the beauty of its landscapes and wildlife, its historical and archaeological monuments and its folklore. This course will explore all of these elements in detail and the varied ways in which they combine.

A wide selection of topics will be explored starting with Folk beliefs and Customs, where superstitions, curses, burial customs, Fairy rings, and other folk tales will be discussed. Then traditional Irish communities and countryside will be examined including topics such as the importance of the thatched cottage, farming and fishing industries. This will be followed by a focus on life on Traditional island communities such as the Blaskets and the Aran Islands. Ireland's indigenous wildlife and flora will also be explored which will lead into the area of National Parks, wildlife reserves and Tourism in Ireland: where the effects and benefits of tourism on the Irish landscape will be delved into in detail, with an emphasis on the museums and interactive centres that are present in Ireland.

Course Descriptions

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10. Human Rights Law

Available Session 2 Only
Code: HRL2

Human rights increasingly define the contours of individual entitlements and state responsibilities at both a national and an international level. Ireland's international human rights commitments create claims and remedies for Irish people that can be pursued through a wide variety of forums.

This course will explore the status of international human rights law in Ireland and the relationship between domestic and international law. The course will begin with a structural focus on the Irish legal system, the international legal system surrounding the United Nations and the regional human rights system established under the auspices of the European Court of Human Rights. The course will then shift to more substantive issues, considering a variety of topical issues in international human rights law, such as children's rights and socio-economic rights to food, shelter, education and health care. The course will have a practical focus, concluding with an emphasis on human rights advocacy on both the national and international stages.

This course requires no prior background in law or international relations, but will also be relevant and challenging for those students who have previously taken Legal Studies, Globalisation, International Relations or Criminology. Students will have an opportunity to negotiate provisions of a new treaty on the rights of persons with disabilities, to present advocacy strategies for an Non-Governmental Organisation of their choice, and to take part in a mock trial in human rights law. The group will have the opportunity to visit the Four Courts and Mountjoy Prison and a number of guest speakers will feature on the programme.

11. Japanese
Available Session 1only
Code: JAP1
This course will offer an insight in to the world of Japanese Culture and Language. Each day the class will learn new language techniques while incorporating various aspects of the amazing Eastern culture. The course will examine traditional and current cultural practices in Japan and promote intercultural awareness. It will provide an appreciation of the main celebrations and customs of Japan while demonstrating a broad understanding of how history shaped modern Japanese society. In this intensive course there will be an opportunity to learn the Japanese alphabet and language and we will concentrate on conversation skills while also examining some Japanese fairytales. Over the three weeks we will also look at Japanese food and the great Japanese art of origami. By the end of the course students will have an opportunity to conduct a research project on some aspect of Japanese culture or language.

12. Journalism

Available Session 2only
Code: JOU2
This course provides an in depth look at the world of journalism and the media more broadly. The course has a dual focus on learning the different writing techniques used by journalists as well as providing a critical examination of the different messages sent out by the media. Students on the course will learn a range of writing techniques including news reporting, interviewing, feature writing and reviewing amongst others. All students on the course will then get the chance to put their new skills into action in the production of a class newspaper.
Topics covered more broadly in the media will include the framing of the same news in different ways by different media outlets, and the portrayal of race, women and crime in the media. There will also be an examination of journalism aimed at teenagers.
The course is suited to students who enjoy writing. It is suitable not just for those who may be interested in pursuing journalism as a career, but all those who are interested in learning more about how a near ever present in our lives operates.

13. Maths Experience

Available Session 2only

Code: MAE2

This course aims to figure out exactly what these statements mean, exploring the length and depth of maths. We'll investigate fundamental subjects such as number theory, geometry, algebra, and calculus, as well as the weirder and stranger extensions of modern mathematics into areas like topology, logic and game theory. Along the way, we'll consider some fascinating applications of maths, including black holes, the maths of games, climate change and weather prediction and chaos theory. Students will have the chance to explore a topic they find fascinating through a project. Absolutely no prior knowledge of maths is assumed or required.

14. Medicine

Available Session 2only
Code: MED2
Do you want to be a doctor in the future? If so, why not try this innovative taster course in medicine, which contains both theoretical and practical elements. Students will learn about health and illness with a focus on anatomy, the causes, prevention and possible cures and treatments of various diseases. The course will focus on problem based learning where these health practitioners of the future will be taught the basics of medicine using case studies, evidence from expert speakers and advice from the instructor. Students will visit the 'hospital wards' in DCU School of Nursing to learn more about patient care and will also carry out microscope work in the lab to identify some common bacteria and viruses that cause infection. Debates and discussions on topics such as 'The value of alternative therapies', 'Should blood+ organ donation be compulsory?' and 'Is biotechnology the way forward for medical treatments?' will be carried out by the students.

15. Modern Business Acumen

(in co-operation with)

Available Session 2only
Code: MBA2

The past year or so has been a very challenging period for the world economy and businesses in general. In the current economic climate, business leaders need to have the maximum relevant information available in order to succeed in a competitive business environment. This course,offered in co-operation with Deloitte, aims to arm students with as much of this relevant information to succeed in the business world.

During the course we will look at the various tools and techniques that give captains of industry the modern business acumen required to drive their business forward. We will look at the internal workings of big business and how managers deal with their staff, the organisational behaviour of firms (internal psychology), and how firms develop a strategy to succeed against competitors.

We will also look at the external environment in which firms operate and examine the importance of the stock market for corporate businesses. This will involve analysing financial information to see how big firms perform on the various stock markets, and also managing your own portfolio of shares. We will examine tax law and how firms and individuals efficiently manage their affairs within the tax legislation. Finally we will examine the international business environment and the impact it has on business.

Interspersed among these topics, there will be guest appearances from various experts in their field who will provide illuminating insights into their respective disciplines and also many lively student debates. If you're interested in how business works, then this is the course for you. Guaranteed to challenge the business leaders of the future!

16. Novel Writing

Code: NW2
Available Session 2only

For everyone who's ever even contemplated writing a novel, the following questions are probably all-too-familiar:

Is it really that important to have an outline? Should you always know how your novel is going to end? How do you write about the same characters for so long without getting fed up of them? What's 'dramatic tension' and 'conflict' all about? What's the difference between writing for children and writing for adults? How do you decide what genre to write in? Is it necessary to do research before writing? Has every idea really been done before or are there still new concepts out there?

This course will answer these questions and guide students towards finding a method of outlining that best suits them and identifying themes and situations they will most enjoy writing about. Students will have the chance to work on individual projects as well as collaborating on the first draft of a novel-length project, enabling them to see how things change and develop from the initial seed of an idea to what ends up on paper. If you've ever had writer's block, if you want to improve your skills, or if you want to impress people by talking about that novel you co-wrote – this is the course for you!

17. Personalisation: Making the Web fit me

Available: Session 1 only
Code: PER1

(In cooperation with)

Why doesn't my Facebook news feed look the way I want it to? Why can't I get find the right answers to my questions on Google? Why can't the different websites I use just focus on just what I need and not force me to click through lots of links to get what I want?

We are all very different - we have different preferences, different ways of learning new things, different ways of arranging our information. We know different amounts about different topics, we have different objectives for what we want to do, and we have diferent expectations as to how it should be presented. So why do we expect the same web site or application to suit all of us? Imagine a World Wide Web where each site dynamically alters what it does just to suit you!
The WWW has been transformed in recent years from a digital library to a global conversation. Social sites such a facebook, bebo and youtube allow people to contribute their own content to the web and to connect with like minded people. As you browse the web and create content, websites can now change what information they present, based on who you are and what you like. This type of improved behaviour is called personalisation, where the website is tailored for you as an individual.

Personalisation can change how you interact with the WWW,

......using personalised games to learn languages, which choose responses based on your learning progress.

......seeing news about your friends in the way that most interests you.

......searching for movie recommendations based on your idea of what makes a good film.

Personalisation allows applications to intelligently adapt how they operate to empower each one of us. This course will allow you to explore personalisation and will show how it can dynamically change web sites, adapt computer games and enhance computer simulations. In the course we will look at what goes on behind the web and how personalisation can empower us by adapting to our learning preferences, prior knowledge or understanding, motivations and challenges.

Course Descriptions

18. Philosophy

Available: Session 2 only
Code: PHIL2

Philosophy is possibly the most fundamental of subjects as it asks the question: `What does it mean to be?'

The aim of this course is to enable students to acquire the basic skills of philosophy i.e. analytic argument and essay writing; and to introduce students to some of the most profound thinkers in history. The course will cover some of the fundamental concerns of philosophy such as:

- The History of Philosophy
- Metaphysics and epistemology
- Logic
- Ethics and Political Theory
- The Philosophy of Mind

Over the course students will be introduced to the Presocratic and Greek philosophers, the enlightenment philosophers from Descartes to Kant, and more recent philosophical movements such as existentialism, phenomenology, and linguistic philosophy. In short the course seeks to teach `The Art of Thinking'.

19. Psychology

Available: Session 2 ONLY
Code: PSY2

The aim of this introduction to Psychology is to encourage students to consider questions about the human mind, brain, and behaviour. Students will be stimulated to think critically and analytically as they review recent psychological research and engage with an empirical research project of their own design. Areas of Psychology which will be studied include personality, child development, social psychology, learning, research methods and the brain.

The course will be delivered in an interactive, dynamic group format intended to foster a questioning and evaluative stance in students. At the end of this module, students can expect to have a better knowledge of the scope of psychological enquiry as well as an appreciation of some of the methodological issues which span the field of psychological research today.

20. Social Psychology

Available: Session 1 ONLY
Code: SPSY1

If psychology is the study of human behaviour, social psychology looks at that behaviour in action in the world. This course seeks to impart a detailed understanding of the burgeoning field of social psychology, focusing specifically on the applied use of psychology in the fields of politics, advertising and healthcare.

Students will be introduced to psychological theory of attitudes, attractiveness, prejudice, groups and teams, attribution, self-identity and helping behaviour. How do our attitudes affect our behaviour? Can we ever truly overcome prejudice? What is the best way to address racial tension in schools? How important are a candidate's looks in a political campaign? How do juries behave, what influences them, and why? This wide-ranging course will use case studies from Irish advertising campaigns, the healthcare system, recent Dáil elections and the 2008 American presidential campaign to deepen students' understanding of the structure and function of human behaviour and its effects in the world. Students will conduct and present research to the class on topics of current interest, and will have the opportunity to design and present the results of a psychological experiment of their choice.

21. Speech Therapy

Available: Session 1 ONLY
Code: ST1

Language and the ability to speak are two major aspects of everyday life. But how often do we stop and think about the processes taking place to produce our stream of words in conversation? This course will analyze language in

terms of its core components, as well as looking at speech mechanisms and what can be done to compensate or augment ineffective verbal speech. Important lifespan stages will be addressed, particularly early childhood development and its bearing on later language acquisition. Major psychological theories that influence communication will be discussed also. Emphasis will be placed on the broader scope of language, looking beyond words alone, at discourse patterns and conversational threads in seemingly straightforward conversations.

22. Sports Science
Available: Session 2 ONLY
Code: SPO2

Did you know that without their support team (e.g physiotherapists, video analysts, equipment specialists) many sporting legends would not have been successful? This course will show how it may be more than the genes you are born with that make you in to a sports star. Many areas will be covered during this programme including, physiotherapy, video analysis and technology. How to train efficiently, prevent injury and recover in the optimum time will all be covered in physiotherapy labs. The human body will also be studied and the differences in the anatomy of top class athletes will be discussed. Students will then analyse video footage of various rugby/football matches and learn how statistics are gathered and then hear how the significance of these figures affects how head coaches adapt their training methods. Questions that will be asked and hopefully answered include:
- Are top branded sports shoes really better than no-name brands?

Course Descriptions

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23. 21st Century Technology Skills
Available Session 1 ONLY
Code: 21ST1

(in co-operation with)   **link** A Dublin City University Designated Research Centre

This three-week course, delivered by DCU's LINK Research Centre, introduces students to social media technologies and explores how these technologies can be used in the workplace. Students will develop critical thinking, problem solving, communication and collaboration skills through learning and applying a variety of digital technologies including (v)podcasting, social networking, blogging and microblogging, multi-user virtual environments (incl. virtual worlds and role-playing games), and mobile phone applications. Students will work in groups on projects with real clients. With a heavy emphasis on applied skills, students will get the opportunity, through project work, research and class discussions to demonstrate these new skills.

24. Veterinary Science
Available Session 1 ONLY
Code: VET1
This course will look at various aspects regarding the cause, treatment and prevention of diseases in animals. The physiology, dietary requirements and the habitat of both household pets and farm animals will be studied. There is an emphasis throughout the programme on problem-based learning and the use of case studies to give an insight into the correct procedures to use when treating animals.

Students will learn the appropriate procedures to approach, handle and restrain animals in theory and also how to manage livestock in a farm environment. They will acquire a fundamental knowledge of how poor husbandry may contribute to disease. The class will be introduced to clinical cases and the correct methods in diagnosis and treatment of various animals. The characteristics and methods of anaesthetics, sutures, and treatment of all types of wounds will be described.

Students will visit the zoological gardens in Dublin to see first hand the physiology of exotic animals and will learn more about some of the most exciting species on the plant including, tigers, snakes and crocodiles. This is a theory based course and suitable for students wishing to pursue a career in the sciences or veterinary medicine.

25. War & Conflict Studies

Available Session 2 only
Code: WCS2
This course in War and Conflict studies will examine the main wars and conflicts of the 20th Century through the lens of three disciplines: history, international relations and international law. The origins, course and consequences of World War I, World War II and the Cold War will be explored as well as the ideologies which dominated their formation (nationalism, fascism, communism, capitalism). We will continue by examining the phenomenon of ethno-political conflict in Yugoslavia and the Arab-Israeli conflict and methods of conflict resolution and post-conflict state-building.

On a thematic level, we will consider the relationship between war, human rights, propaganda, terrorism, the persecution of war crimes and the regulation of conflict by the international community. Throughout the course, equal emphasis will be placed on diplomatic, strategic, military and cultural perspectives and students will be stimulated by carefully selected readings, documentaries, films and role-play activities. Discussions and debates will also feature strongly. In short, this course will encourage students to explore why and how societies go to war and to examine the changing nature of conflict in the 20th century.

26. Write, Act, Perform
Available Session 2 ONLY
Code: WAP2
Books, Film and Theatre are all linked and this course will focus on how each of these areas influence each other. To begin with, students will look at different types of poetry, including song, and write their own examples, compiling a class anthology by the end of the week. Guest Poets will read out from their own work and the students themselves will perform their own poems in front of the group.

Students will then move on to studying the links between film adaptations and the books on which they were based and will examine how the different mediums convey sense and meaning. Students will then create their own character for a novel or play and perform a monologue of their character. Well known plays including various Shakespeare pieces will be studied and students will write their own play and perform it to the class in the final week.

By the end of the course, students will have learned the most important techniques of literary analysis through the close study of poetic, novelistic and theatrical works, as well of the application of these techniques to the process of creating their own texts.

27. Writing for Life
Available Session 1 ONLY
Code: WRIT1
This course is designed for young writers to improve their skills. The course will deal with various aspects of writing including short stories, novellas, and long narrative. A section of the course will be devoted to writing in verse, using metre and constructing poetry. We will look at the development of writing from the idea stage to the actual written word on the page. Works of established writers will be examined to help us with our craft.

Appendix B: Questionnaires

CTYI questionnaire for parents of children on Saturday classes

Note: *The information that you supply is for research purposes only, and will remain completely confidential*

Please circle your answers where appropriate.

Name: _____   **Sex :**   Male   Female

Child's name :   _____   **Child's age:**
_____

Current Course Attended and Venue :
_____

1.   Has your child previously attended a CTYI class?   Yes
No

2.   How did classes at CTYI first come to your attention?

Through the school

Talking to other parents on the course

Magazine/newspaper article

Website

If there was a different source please indicate:
_____

3. **In general, how satisfied academically were you with this set of classes that your child attended at CTYI?**

| Very satisfied | Somewhat dissatisfied |

Quite satisfied Very dissatisfied

Indifferent

4. **How would you rate your child's attitude to attending CTYI classes?**

Very positive Somewhat negative

Somewhat positive Very negative

Neither positive or negative

5. **Do you feel your child has benefited from attending classes at CTYI?**

Yes No

6. **If you answered yes to the previous question, please indicate if you felt the benefit was more**

Academic Social Equal academic and socially

7. **How was your child assessed to participate on the CTYI programme?**

CTYI assessment Psychologist Report

8. What reasons, if any, do you have for your child attending the courses at CTYI?

9. **Rate the following statements about the reasons why your child may have attended this CTYI course, using the scale provided. If you have any**

other reasons, please specify these in the space provided at the end of the question:

		Strongly Agree	Somewh at Agree	Neither agree nor disagree	Somewh at disagree	Strongly Disagree
a.	He/She attended this course to learn new things	1	2	3	4	5
b.	He/She attended this course to improve his study techniques	1	2	3	4	5
c.	He/she attended this course because the subject interested them.	1	2	3	4	5
d.	He/she attended this course to make new friends.	1	2	3	4	5

If your child has attended CTYI previously , please rate the following statements.

		Strongly Agree	Somewh at Agree	Neither agree nor disagree	Somewh at disagree	Strongly Disagree
e.	He/she attended this course to renew old acquaintances	1	2	3	4	5
f.	He/she attended this course because they *enjoyed* a previous experience at CTYI	1	2	3	4	5

Other reason(s)

_____ _____

_____ _____

10.   What achievements do you feel your child has realised as a result of their attendance on the CTYI course?

Name of school (optional) :_____

Type of school : Public Private

Type of school : All boys All girls Mixed

No of pupils in school (approx) : _____

No of pupils in your child's class : _____

Current Class in School : _____

11. **In general, how satisfied academically is your child at school?**

   Very satisfied Somewhat dissatisfied

   Quite satisfied Very dissatisfied

   Indifferent

12. **How would you rate your child's attitude to attending school?**

   Very positive Somewhat negative

   Somewhat positive Very negative

   Neither positive or negative

13. **Does your child's school offer any provisions for high ability children?**

   Yes No

14. **If you answered yes please indicate the type of provision offered.**

   _____
   _____

15. **What do you think is your child's favourite subject at school?**

   _____
   _____

16. **Relative to his/her peers in school how would you rank your child's ability in the following subjects**

	Much better	**Somewh at better**	**About equal**	**Somewh at worse**	**Much worse**
Irish	1	2	3	4	5
English	1	2	3	4	5
Maths	1	2	3	4	5
Science	1	2	3	4	5

History	1	2	3	4	5
Geography	1	2	3	4	5
Physical Education (PE)	1	2	3	4	5

17.   How comfortable is your child with studying on his/her own?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Neutral

18.   How comfortable are you with your child's intellectual ability?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Does not affect me

19.   In terms of encouragement and support for your child with regard to their ability please indicate the level of support he/she receives from the following groups.

	Strong support	**Some support**	**Little support**	**No support**
Parents	1	2	3	4
Siblings	1	2	3	4
Teachers	1	2	3	4
Friends	1	2	3	4
Classmates	1	2	3	4

20.   How comfortable are you with the term gifted to describe your child's academic ability?

        Very comfortable   Slightly uncomfortable

        Quite comfortable   Very uncomfortable

        Neutral

21.   Would you describe your child as academically gifted?

        Yes   No

Please explain your answer

CTYI questionnaire for students on Saturday classes

Note: *The information that you supply is for research purposes only, and will remain completely confidential*

Please circle your answers where appropriate.

Name: _____   **Sex :**   Male   Female

Current Class in School :   _____   **Age :** _____

Current Course Attended and Venue :
_____

1.   Have you previously attended a CTYI class?   Yes   No

2.   In general, how satisfied academically were you with this set of classes at CTYI?

> Very satisfied   Somewhat dissatisfied
>   Quite satisfied   Very dissatisfied
> Indifferent

3.   How would you rate your attitude to attending CTYI classes?

> Very positive   Somewhat negative
> Somewhat positive   Very negative
> Neither positive or negative

4.   Do you feel you have benefited from attending classes at CTYI?

> Yes   No

5.   **If you answered yes to the previous question, please indicate if you felt the benefit was more**

> Academic   Social   Equal academic and socially

6.   What reasons, if any, do you have for attending the courses at CTYI?

7. **Rate the following statements about the reasons why you may have attended this CTYI course, using the scale provided. If you have any other reasons, please specify these in the space provided at the end of the question:**

		Strongly Agree	Somewhat Agree	Neither agree nor disagree	Somewhat disagree	Strongly Disagree
a.	I attended this course to learn new things	1	2	3	4	5
b.	I attended this course to improve my study techniques	1	2	3	4	5
c.	I attended this course because the subject interested me.	1	2	3	4	5
d.	I attended this course to make new friends.	1	2	3	4	5

If you have attended CTYI previously , please rate the following statements.

		Strongly Agree	Somewhat Agree	Neither agree nor disagree	Somewhat disagree	Strongly Disagree
e.	I attended this course to renew old acquaintances	1	2	3	4	5
f.	I attended this course because I *enjoyed* a previous experience at CTYI	1	2	3	4	5

Other reason(s)

_____ _____

_____ _____

8. **What achievements do you feel you have realised as a result of your attendance on the CTYI course?**

Name of school (optional) :_____

Type of school :   All boys   All girls   Mixed

No of pupils in school (approx) : _____

No of pupils in your class : _____

Current Class in School : _____

9.   In general, how satisfied academically are you at school?

      Very satisfied   Somewhat dissatisfied

           Quite satisfied   Very dissatisfied

      Indifferent

10.   How would you rate your attitude to attending school?

      Very positive   Somewhat negative

      Somewhat positive   Very negative

      Neither positive or negative

11.   What is your favourite subject at school?

_____
_____

12.   Do you get enough opportunity to study your favourite subject at school?

      Yes   **No**

Please explain your answer.

_____
_____
_____

13.   Relative to your classmates in school how would you rank your ability in the following subjects

	Much better	**Somewh at better**	**About equal**	**Somewh at worse**	**Much worse**
Irish	1	2	3	4	5
English	1	2	3	4	5
Maths	1	2	3	4	5
Science	1	2	3	4	5
History	1	2	3	4	5
Geography	1	2	3	4	5
Physical Education (PE)	1	2	3	4	5

14.   How comfortable are you with studying on your own?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Neutral

15.   How comfortable are you with your intellectual ability?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Does not affect me

16.   In terms of encouragement and support that you receive with regard to your ability please indicate the level of support you receive from the following groups.

	Strong support	**Some support**	**Little support**	**No support**
Parents	1	2	3	4
Siblings	1	2	3	4
Teachers	1	2	3	4
Friends	1	2	3	4
Classmates	1	2	3	4

17.   How comfortable are you with the term gifted to describe your academic ability?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Neutral

18.   **Would you describe yourself as academically gifted?**

Yes   No

Please explain your answer

Please return the completed questionnaire to CTYI, Dublin City University, Dublin 9.
Thanks for your help in completing this form.

CTYI questionnaire for parents of children on Summer courses

Note: *The information that you supply is for research purposes only, and will remain completely confidential*

Please circle your answers where appropriate.

Name: _____   **Sex :**   Male   Female

Child's name :   _____   **Child's age :**
_____

Course attended this summer :
_____

1.   Has your child previously attended a CTYI class?   Yes
No

2.   How did classes at CTYI first come to your attention?

>   Through the school
>   Talking to other parents on the course
>   Magazine/newspaper article
>   Website

If there was a different source please indicate:
_____

3.   In general, how satisfied academically were you with this set of classes that your child attended at CTYI?

>   Very satisfied   Somewhat dissatisfied
>   Quite satisfied   Very dissatisfied
>   Indifferent

4.   How would you rate your child's attitude to attending CTYI classes?

>   Very positive   Somewhat negative
>   Somewhat positive   Very negative
>   Neither positive or negative

5. **Do you feel your child has benefited from attending classes at CTYI?**

Yes   No

6. **If you answered yes to the previous question, please indicate if you felt the benefit was more**

Academic   Social   Equal academic and socially

7. **How was your child assessed to participate on the CTYI programme?**

CTYI assessment   Psychologist Report

8. **What reasons, if any, do you have for your child attending the courses at CTYI?**

9. **Rate the following statements about the reasons why your child may have attended this CTYI course, using the scale provided. If you have any other reasons, please specify these in the space provided at the end of the question:**

		Strongly Agree	Somewh at Agree	Neither agree nor disagree	Somewh at disagree	Strongly Disagree
a.	He/She attended this course to learn new things	1	2	3	4	5
b.	He/She attended this course to improve his study techniques	1	2	3	4	5
c.	He/she attended this course because the subject interested them.	1	2	3	4	5
d.	He/she attended this course to make new friends.	1	2	3	4	5

If your child has attended CTYI previously , please rate the following statements.

		Strongly Agree	Somewh at Agree	Neither agree nor disagree	Somewh at disagree	Strongly Disagree
e.	He/she attended this					

course to renew old acquaintances	1	2	3	4	5

f. He/she attended this course because they *enjoyed* a previous experience at CTYI

	1	2	3	4	5

Other reason(s)

_____ _____

_____ _____

10. **What achievements do you feel your child has realised as a result of their attendance on the CTYI course?**

Name of school (optional) :_____

Type of school : Public Private

Type of school : All boys All girls Mixed

No of pupils in school (approx) : _____

No of pupils in your child's class : _____

Current Year in School : _____

11. **In general, how satisfied academically is your child at school?**

Very satisfied	Somewhat dissatisfied
Quite satisfied	Very dissatisfied
Indifferent	

12. **How would you rate your child's attitude to attending school?**

Very positive	Somewhat negative
Somewhat positive	Very negative
Neither positive or negative	

13. **Does your child's school offer any provisions for high ability children?**

Yes No

**14.	If you answered yes please indicate the type of provision offered.**

_____

_____

**15.	What do you think is your child's favourite subject at school?**

_____

_____

16.   Relative to his/her peers in school how would you rank your child's ability in the following subjects

	Much better	Somewh at better	About equal	Somewh at worse	Much worse
Irish	1	2	3	4	5
English	1	2	3	4	5
Maths	1	2	3	4	5
Science	1	2	3	4	5
Languages	1	2	3	4	5
Business	1	2	3	4	5
History	1	2	3	4	5
Geography	1	2	3	4	5
Physical Education (PE)	1	2	3	4	5

17.   How comfortable is your child with studying on his/her own?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Neutral

18.   How comfortable are you with your child's intellectual ability?

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Does not affect me

19.   In terms of encouragement and support for your child with regard to their ability please indicate the level of support he/she receives from the following groups.

	Strong support	Some support	Little support	No support
Parents	1	2	3	4
Siblings	1	2	3	4
Teachers	1	2	3	4
Friends	1	2	3	4
Classmates	1	2	3	4

20.   How comfortable are you with the term gifted to describe your child's academic ability?

        Very comfortable   Slightly uncomfortable

        Quite comfortable   Very uncomfortable

        Neutral

21.   Would you describe your child as academically gifted?

        Yes   No

Please explain your answer

Please return the completed questionnaire to CTYI, Dublin City University, Dublin 9.
Thanks for your help in completing this form.

CTYI questionnaire for students on Summer courses

Note: *The information that you supply is for research purposes only, and will remain completely confidential*

Please circle your answers where appropriate.

Name: _____   **Sex :**   Male   Female

Current Year in School :   _____   **Age**
:_____

Current Course Attended in DCU :
_____

1.   Have you previously attended a CTYI class?   Yes   No

2.   In general, how satisfied academically were you with this set of classes at CTYI?

            Very satisfied   Somewhat dissatisfied
                        Quite satisfied   Very dissatisfied
            Indifferent

3.   How would you rate your attitude to attending CTYI classes?

            Very positive   Somewhat negative
            Somewhat positive   Very negative
            Neither positive or negative

4.   Do you feel you have benefited from attending classes at CTYI?

                  Yes   No

5.   **If you answered yes to the previous question, please indicate if you felt the benefit was more**

Academic   Social   Equal academic and socially

6.   What reasons, if any, do you have for attending the courses at CTYI?

7.   Rate the following statements about the reasons why you may have attended this CTYI course, using the scale provided. If you have any other reasons, please specify these in the space provided at the end of the question:

		Strongly Agree	Somewh at Agree	Neither agree nor disagree	Somewh at disagree	Strongly Disagree
a.	I attended this course to learn new things	1	2	3	4	5
b.	I attended this course to improve my study techniques	1	2	3	4	5
c.	I attended this course because the subject interested me.	1	2	3	4	5
d.	I attended this course to make new friends.	1	2	3	4	5

If you have attended CTYI previously , please rate the following statements.

		Strongly Agree	Somewh at Agree	Neither agree nor disagree	Somewh at disagree	Strongly Disagree
e.	I attended this course to renew old acquaintances	1	2	3	4	5
f.	I attended this course because I *enjoyed* a previous experience at CTYI	1	2	3	4	5

Other reason(s)

_____ _____

_____ _____

____

8. **What achievements do you feel you have realised as a result of your attendance on the CTYI course?**

Name of school (optional) :_____

Type of school :   All boys   All girls   Mixed

No of pupils in school (approx) : _____

No of pupils in your class : _____

Current Year in School : _____

9. **In general, how satisfied academically are you at school?**

> Very satisfied   Somewhat dissatisfied
>
> > Quite satisfied   Very dissatisfied
>
> Indifferent

10. **How would you rate your attitude to attending school?**

> Very positive   Somewhat negative
>
> Somewhat positive   Very negative
>
> Neither positive or negative

11. **What is your favourite subject at school?**

_____
_____

12. **Do you get enough opportunity to study your favourite subject at school?**

> **Yes   No**

Please explain your answer.

_____
_____
_____

13. **Relative to your classmates in school how would you rank your ability in the following subjects**

	Much better	Somewhat better	About equal	Somewhat worse	Much worse
Irish	1	2	3	4	5
English	1	2	3	4	5
Maths	1	2	3	4	5
Science	1	2	3	4	5
History	1	2	3	4	5
Geography	1	2	3	4	5
Languages	1	2	3	4	5
Business	1	2	3	4	5
Physical Education (PE)	1	2	3	4	5

14. **How comfortable are you with studying on your own?**

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Neutral

15. **How comfortable are you with your intellectual ability?**

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Does not affect me

16. **In terms of encouragement and support that you receive with regard to your ability please indicate the level of support you receive from the following groups.**

	Strong support	Some support	Little support	No support
Parents	1	2	3	4
Siblings	1	2	3	4
Teachers	1	2	3	4
Friends	1	2	3	4
Classmates	1	2	3	4

17. **How comfortable are you with the term gifted to describe your academic ability?**

Very comfortable   Slightly uncomfortable

Quite comfortable   Very uncomfortable

Neutral

18. **Would you describe yourself as academically gifted?**

Yes   No

Please explain your answer

Thanks for your help in completing this form.

Appendix C: Interview Questions and Transcripts

Student Interview Information

Can you describe the classes that you have attended at CTYI?

Prompts

Academic challenge
Academic Satisfaction
Attitude
Difference from School

Can you tell me a little bit about your school?

Prompts

Academic Challenge
Academic Satisfaction
Attitude
Difference from CTYI

What is your favourite subject at school?

Prompts

Are you the best at this subject in your class?
What about other subjects?
Are there other pupils in the school who are very good?

You attend CTYI, can you tell me a bit about your ability?

Prompts

Are you comfortable with it?
What about the term gifted?
Would you describe yourself as gifted?

Parent Interview Information

Can you describe the classes that your child has attended at CTYI?

Prompts

Academic challenge
Academic Satisfaction
Attitude
Difference from School

Can you tell me a little bit about your child's experience at school?

Prompts

Academic Challenge
Academic Satisfaction
Attitude
Difference from CTYI

What is his/her favourite subject at school?

Prompts

Are you the best at this subject in your class?
What about other subjects?
Are there other pupils in the school who are very good?

Your child attends CTYI, can you tell me a bit about their ability?

Prompts

Are you comfortable with it?
What about the term gifted?
Would you describe your child as gifted?

I	Can you describe the classes that you have attended at CTYI?
S1	I am attending journalism and we learn things about how to write for a paper and do stuff like feature articles. I like everything in the classes. It's different to school. We don't do journalism in school and we learn a lot. I like writing reports and stories in the journalism class.
I	What is your attitude towards coming to DCU for classes?
S1	Good.
I	What would you hope to achieve by coming on a course like this?
S1	I would like to become a very good writer.
I	Can you tell me a little bit about your school?
S1	Well, I'm in fourth class and I like it. It's different to coming here though.
I	What is your attitude towards attending school?
S1	It is good.
I	Do you think you get challenged in school?
S1	Not exactly, no. It's just that the questions are not as hard as they would be here and I know the answers easily in school.
I	What is your favourite subject in school?
S1	Spellings and Reading, mostly reading. In school though reading is quite easy and I would do more reading at home. I read stories and books at home that would be more advanced than school.
I	What would you like to study more of at school?
S1	Better English challenges. I find English a bit easier in school.
I	Is the chance to study journalism, a subject that you don't do in school an incentive to come to CTYI?
S1	Definitely. To try something different that I have an interest in. It makes it more fun here.
I	In terms of ability would you think you were better than your classmates at school, the same as them or worse than them?

S1	I would be better than most of the students in my class although there are some children who would be better than me. I'm better at certain subjects. I'm better at maths and reading.
I	What about ones that you were not as good at as others in your class?
S1	I'm not as good as I could be in Irish. I find it harder than Maths and English.
I	What about sports?
S1	I'm very good at sports. I really like them.
I	Would you be the best in your class?
S1	I would be in the middle.
I	You attend CTYI, can you tell me a bit about your ability?
S1	Well, I guess I come here because I'm good at some stuff. The boys in my class would not be interested in a programme like this one. The girls may be able and might be interested.
I	Who decided whether you come here, is it your parents or yourself.
S1	Definitely myself.
I	Have you ever heard the term gifted?
S1	No.
I	If you have somebody who is very talented at school, they may be described as gifted. Would you describe yourself as gifted?
S1	No. I don't think so. I would be good but I know that I'm not always right.
I	How comfortable with your ability?
S1	Very comfortable.
I	In school if the teacher asks a question to the class are you comfortable putting your hand up and answering?
S1	Yes, definitely.

I	Can you describe the classes that you have attended at CTYI?
S2	I think they are fun. You get to write stories and this is good.
I	Would you be satisfied with the classes?
S2	Yes definitely, they are great craic.
I	Do you find them challenging academically?
S2	Not this class because it's very enjoyable and you go at your own pace but other classes like forensics were more challenging but fun.
I	What is your attitude towards coming here?
S2	It would be good.
I	Who decided whether you come here, you or your parents?
S2	It's my own decision to come.
I	What would you hope to achieve from attending a programme like this one?
S2	Learn how to write articles for newspapers, radio and television. Being able to write stories.
I	What about socially, anything you would like to achieve there?
S2	No, not really.
I	Can you tell me a little bit about your school?
S2	It's good we are writing stories in school but I like to come here and do a bit more.
I	Are you challenged in school?
S2	A bit. In English and Irish maybe but not the others.
I	What is your favourite subject at school?
S2	Maths. We don't do lots in school and it's very simple.
I	How would you rank yourself compared to other people in your class at school.
S2	Probably first in Maths and middle in English and Irish.
I	What about sports?

S2	Well I'm not the best at them but I like participating in them.
I	What is your attitude towards school?
S2	I love going to school.
I	Are you satisfied with the level of challenge for you in school?
S2	It's fine in most of the subjects but I would like to do more Maths.
I	What about science?
S2	We don't do much but I like the experiments and stuff. I'm good at science.
I	You attend CTYI, can you tell me a bit about your ability?
S2	I think I'm about medium ability.
I	Are you comfortable with ability?
S2	Yeah, it's just the way I am.
I	In school do you always put your hand up if you know the answer?
S2	Yes. I like doing this.
I	Are you comfortable working on your own?
S2	I think it's good and I can do it.
I	Do you ever get a chance to practice at working on your own?
S2	We do projects and write stories.
I	Do you prefer it when your teacher is teaching you or do you prefer working by yourself?
S2	I prefer to do it myself because when I do it by myself there's no noise around me and I can concentrate better
I	Have you ever heard the term "gifted"?
S2	No.
I	Well say you have someone who's really good at something, they'd be considered gifted in that area. Would you consider yourself gifted in maths?
S2	Yeah.

I	Would you consider yourself challenged in that area?
S2	Yeah.

I	Can you describe the classes that you have attended at CTYI?
S3	I like it
I	What other courses have you done here before?
S3	Sport science
I	And how did you find that?
S3	It was very good
I	Did you find that you were challenged in those classes?
S3	No
I	How do you feel about coming to the classes here?
S3	Good
I	And is it your parents who want you to come or do you like coming here yourself?
S3	A bit of both. If I didn't want to come they probably wouldn't make me come
I	And what do you get out of the course at the end of it?
S3	Learn some new stuff
I	What kind of stuff?
S3	I don't really know
I	And what about studying? Do you think by coming to CTYI you learn how to do that better?
S3	I learn to do it better

I	And what about sport science – what did you like or get out of that course?
S3	I liked it because I'm into sport and it was good
I	And what about socially? Did you make friends here or do you just come here to hear the classes and learn new things?
S3	Both
I	And is it easier to make friends here, harder, or the same?
S3	Same
I	Can you tell me a little bit about your school?
S3	It's good, I like it
I	In the morning do you look forward to going to school or do you wish you had a day off?
S3	A day off
I	Would you ever say that you don't want to go to school cos you don't like it?
S3	No
I	And how challenged are you in school? Do you find it hard, easy or medium?
S3	Sometimes hard and sometimes easy
I	And what do you find hard?
S3	Sometimes I find bits of English hard, and sometimes maths and sometimes Irish. It depends.
I	And what do you find easy?
S3	It's sort of the same.
I	And what's your favourite subject?
S3	Maths
I	And do you do much of that in school?
S3	Yep
I	Would you like to do more of it?

S3	I wouldn't mind doing more of it
I	And how hard is the maths that you're doing?
S3	It's hard enough, but I can do it
I	How would you rank yourself in your class in Maths?
S3	Second or third
I	And what about in English?
S3	Fifth or sixth
I	And Irish?
S3	Around the middle
I	Does anyone else in your school or class come to CTYI?
S3	There's someone from my class, but he comes on Saturdays
I	And he'd be near the top in terms of ability too?
S3	Yeah
I	Do you like sports?
S3	Yeah. I like playing it and watching it
I	Are you good at sports?
S3	I'm very good
I	And where would you rank yourself in your class at sports?
S3	At least in the top 5
I	And do you play sports outside of school?
S3	I play football
I	You attend CTYI, can you tell me a bit about your ability?
S3	I'm quite comfortable with it.
I	In school, if you know the answer to a question would you always put your hand up?

S3	Most of the time
I	Do you do any study on your own?
S3	Yeah
I	Do you like it?
S3	Yeah
I	Which do you prefer, studying on your own or the teacher teaching you in school?
S3	On my own
I	Why is that?
S3	Cos you can concentrate more and there's not much talking
I	And is it hard sometimes to concentrate in school?
S3	Sometimes, but mostly not
I	And what about at CTYI? Do you find it hard to concentrate or do you prefer working on your own here or in the class here?
S3	In the class here
I	And why is that?
S3	Don't really know
I	Is it because everyone in these classes are interested in the topic, and they all want to be here, do you think?
S3	Yeah, yeah
I	Have you ever heard the term "gifted"?
S3	No
I	Well, if you have someone who's very bright in a particular area they would be considered gifted. So would you consider yourself gifted, or very bright, or bright, or not so bright?
S3	Not sure. It might be bright or it might be gifted

I	Can you describe the classes that you have attended at CTYI?
S4	They're very good. The last one I went too was very good and this one seems to be good so far and I'll see what it's like in the next two weeks
I	Do you find yourself challenged in these classes?
S4	Yeah, this is pretty hard. I'm learning a lot of new things
I	And what sort of things are you learning?
S4	Well this class is about chemistry, so I'm learning all about the atom and molecules
I	And what about the courses you've done in the past? What have you learnt that you didn't know before?
S4	When I did the sports-science course I learned a lot about the kinds of foods you should eat and how injuries happen. And the courses I did in athlone; there was one about journalism and there was a creative writing one. That was all about how to write stories and the different types of stories that there are
I	And how would that be different to school?
S4	You don't learn just one particular subject in school. I think it's better here, going to one specific class at a time because you can learn about that and when you're finished go on to something else
I	What's your attitude to attending courses here?
S4	I like going, and they're very good
I	What achievements would you hope to get by coming on a course like this?
S4	I want to do very well in secondary school, in my junior and leaving cert
I	Would that be the main thing you'd hope to get out of it?
S4	Well, it depends what I want to do when I get older
I	So classes like these help you get a glimpse at what you might like to do?
S4	Yeah
I	And what about socially? Is there any social achievement you'd like to get when you come here?

S4	Well, it's nice to make new friends and meet new people.
I	Is that easier, harder or the same?
S4	It's easy to meet new people if you're doing the same thing as them because you can start talking about what you're doing, and then eventually become good friends
I	Can you tell me a little bit about your school?
S4	It's usually very good. Some things are a bit easy. There isn't much at the moment that I'm finding very difficult.
I	So you're not too challenged?
S4	No
I	So you'd be more challenged when you come to classes here?
S4	Yeah
I	And what's your attitude towards attending school?
S4	I go and I like it, my friends are there. We learn new things and it's good, but sometimes it can be a bit boring. It's good overall.
I	What's your favourite subject in school?
S4	Geography
I	Do you do much geography in school?
S4	We have in most years. This year it's been more about history and maths and English
I	How many is in your class?
S4	22
I	Where would you rank yourself in your class in geography?
S4	Near the top
I	And what about in maths?
S4	Definitely at the top
I	And in Irish?

S4	I go to an Irish school, so there's a lot of people, but I'm up there
I	English?
S4	I think my English is very good too
I	Do you like sports?
S4	I do
I	How would you rank yourself in sports?
S4	Very high – sixth or fifth
I	Are sports important to you as well?
S4	Yeah
I	You attend CTYI, can you tell me a bit about your ability?
S4	It's good, I like it. I like reading, and I'm able to understand it so it makes books seem better. It's also very good in sports, as you can learn from the professionals, and if you're smart you can find out all the different statistics
I	In school if you know the answer to a question do you put your hand up?
S4	Yeah
I	All the time?
S4	Most questions, yeah
I	How do you feel about working on your own?
S4	I can work on my own, but I prefer working with a partner but it doesn't matter really
I	How comfortable are you with working on your own?
S4	It's good, but I think it's better with partners
I	Why?
S4	For one thing you have a friend with you, which is good, and they can help you out with the different things. Especially if you have a project where you have to draw something and you're not very good at art but you're very good at facts, they could maybe draw a picture of a dancer and you could write a bit about a famous theatre .

I	So it's good to have another opinion and have someone to bounce ideas off?
S4	Yeah. If you're on your own usually you can go with what you want, but sometimes you can find better ideas if you and your partner have different ideas
I	Have you ever heard the term gifted?
S4	Yep
I	What have you heard about it?
S4	To me it means being very good at things. I'm not very good at some things, but that's what they say it means. I like it, I'm happy being told I'm very good at things
I	So would you consider yourself gifted?
S4	At some things, yes, like maths and english. I'm not very gifted at art
I	Can you describe the classes that you have attended at CTYI?
S5	It's really really good and I particularly like the experiments
I	Do you find yourself challenged in the class?
S5	Sometimes it is, but not most of the time, it's just taking down the notes
I	Do you find it hard or difficult, compared to school?
S5	Around the same, but more fun
I	What's your attitude to coming to the classes?
S5	My mam asked me if I wanted to come and I said yes. It was my decision
I	And are you positive about coming?
S5	Yeah
I	What achievements would you hope to get by coming on a class like this?
S5	It would probably be easier to do chemistry in school
I	And what about socially?

S5	Yeah, I've made new friends
I	Was that something that you hoped would happen here, or is it just a by-product?
S5	A bit of both. I kinda hoped I'd make new friends, that I wouldn't be the oldest or the youngest in the class and wouldn't make any new friends
I	Can you tell me a little bit about your school?
S5	Yeah, it's fine. Sometimes the lessons are a bit tiring because some of the books are really out of date – my friends mum used one of our books
I	Are you satisfied with the challenge you get in school?
S5	Yeah
I	What's your attitude towards going to school?
S5	I don't mind but I don't like getting up in the morning
I	And would your attitude to coming here be similar, or is it different?
S5	Sometimes it's a bit different because we haven't gotten any homework here yet, and we do in school
I	What's your favourite subject in school?
S5	Maths would be one of my favourites, and languages
I	Do you do enough maths in school, or would you prefer to do more?
S5	We do loads, over an hour. I'm happy with that
I	How would you rank yourself in maths in your class in school?
S5	There's 30 in the class. I'd be about third in the girls, not sure about the boys
I	And what about English?
S5	Yeah, I'm good at that
I	And how would you rank yourself in that?
S5	About seventh maybe

I	What about in Irish?
S5	Irish is one of my best subjects. I'd be about second best in the class
I	Does anyone else from your school come to ctyi classes?
S5	My friend tried out but he didn't get through, and there's my sister
I	How do you feel about your ability in general?
S5	I'm in between, yeah, and I'm happy with it
I	Do you like sports?
S5	I love sports
I	And how would you rank yourself in sports?
S5	Well I do gymnastics and no-one else in my class does that
I	So you're good at sports?
S5	Yeah
I	And would that be one of your favourite things?
S5	I don't like P.E. in school, but I do it outside of school. We do football and I don't like football
I	You attend CTYI, can you tell me a bit about your ability?
S5	I think it's a good thing, I'm pretty comfortable with it.
I	If there's a question asked in school, would you put your hand up all the time?
S5	Not all the time, I wouldn't know the answer all the time, but I'd give it a shot
I	And if you know the answer do you always put your hand up?
S5	No
I	Why not?
S5	I don't know. Sometimes I wouldn't be too sure of it
I	And do other people put their hand up all the time?

S5	No
I	So what happens normally?
S5	He'll ask the question and then one or two people will answer it. Then he'll ask another question, but more people answer each time, probably
I	Are you comfortable working on your own?
S5	Yeah
I	Do you do much of that?
S5	We do projects once a year, one with a student teacher and one with our teacher. We do it on countries, and with the student teacher we always have to work in groups, and that's good and then our teacher does it individually
I	Which do you prefer?
S5	Probably groups, because everybody works together and you get a much bigger project done
I	So the groups are easier?
S5	Not easier, you just get more done
I	Do you find working on your own easy or hard?
S5	It's not hard, about medium probably
I	Have you ever heard the term "giftedness"?
S5	No
I	Can you describe the classes that you have attended at CTYI?
S6	I wanted to go because I wanted to make stuff blow up but we're not going to because my teacher never tells the truth – he says we'll blow something up next week but it didn't happen. He also said we'd make an atomic bomb, and that didn't happen!
I	Do you like coming to these classes?
S6	Yeah
I	Why?

S6	Cos it's fun
I	What would you hope to achieve at the end of it?
S6	I don't know, really
I	Can you tell me a little bit about your school?
S6	I don't like it.
I	Why not?
S6	There's a lot of boring stuff
I	What's boring?
S6	Work. I have a test at the end of the year and I'll probably get everything wrong in maths
I	Why would that be?
S6	I don't really like maths. I don't really concentrate on it cos I don't like it
I	And how do you feel about attending school?
S6	Happy and bored
I	So in the morning do you look forward to going to school?
S6	Sometimes I do and sometimes I don't
I	When do you not look forward to it?
S6	Mostly when it's a long day, when we have to do something and it takes til three when we're supposed to go home at a quarter past 2
I	When do you like going, apart from when it's a short day?
S6	When it's normal
I	And what would you do those days that you like?
S6	P.E. and art, mostly
I	What's your favourite subject in school?
S6	Swimming
I	And when do you do swimming?

S6	Wednesdays, but we don't do that any more. Next year I'll be going again.
I	Do you like P.E.?
S6	Yeah
I	How often do you do PE?
S6	Not very often, maybe like once a month
I	Would you like to do more PE?
S6	Yes!
I	Do you like English?
S6	No, it's kinda boring since I already know, like, every English word, except some I don't understand and some I can't pronounce.
I	Where would you rank yourself in English in your class?
S6	My class is mixed in with the first class, so second class and first are together, but I'm probably first, but everyone would be first because everyone knows English
I	But would you be better at English than other people in your class?
S6	I'm better than this guy called gareth and harrison because they can't pronounce them properly. Harrison can't pronounce estate properly, he says m'estate
I	What about in maths? Are you best in your class at maths?
S6	No
I	Are there loads better than you, or some better than you, or half better than you?
S6	Half
I	What about in Irish?
S6	I'm not very good. I don't like it, it's boring
I	You attend CTYI, can you tell me a bit about your ability?
S6	I don't really think about it much.

I   Can you work on your own?

S6   Sometimes. Sometimes I just don't think about it

I   What about working in groups?

S6   I like doing that

I   Do you prefer it to working on your own?

S6   No. I prefer to work with my friends. Although there's only two girls that are my friends, and one I hate cos she's a big bossy-boots

I   In school, if you're asked a question, do you put your hand up if you know the answer?

S6   Yeah, but if it's Irish I don't usually answer

I   Why not?

S6   Because sometimes they're hard questions that I don't even get, I don't know what the question means

I	Can you describe the classes that your child has attended at CTYI?
P1	She just turned nine there in April and this is her first course. I am not really concerned with her academic achievements as yet as this is only her first course, and it runs until she's 16 anyway. I'm more interested in her finding a place where she fits in and where her work level is to her interests
I	And what are her attitudes to attending the classes?
P1	It's extremely positive, she looks forward to it. From when she comes out at half five, until next Wednesday she's so looking forward to it and really happy. When she comes out she's extremely chatty and when we come down, we come down from Belfast, when we're driving down she's watching her dvds in the back, but as soon as we park she's really chatty, she's really happy to be here
I	What ambitions would she have had in attending a course like this?
P1	She was quite nervous at the start, because she does see herself differently in her own school environment at the minute. She knows she's different from the other kids so she didn't really know what to expect; she didn't know if she would fit in, or if she'd make friends or what the people where going to be like. But she's been pleasantly surprised
I	Can you tell me a bit about your child's experiences at school?
P1	Of course they're all gifted, high-IQ children down here, but she's been reading and writing since she was two so her curriculum, she's in primary-5 now up in Belfast which is the same as 3rd class down here, it's so below her ability level and they're not interested in acceleration or doing anything for her, enrichment classes or anything. So we're actually moving schools in September, I'm putting her into private school
I	What's her attitude about attending school?
P1	Negative this year. Previously she loved school, loved learning until she got to 8/9 years of age and then she had no interest at all and she just didn't want to go, whereas beforehand she would have had a panic-attack if we were late in the traffic.
I	What's her favourite subject in school?
P1	In school she excels at English and always did from a young age; very verbal, and her reading and writing, she always excelled at that. Her interests are in chemistry and forensics, which are well beyond the curriculum

I	In school, would she get enough opportunities to do English at the level that she is at?
P1	No, none at all. The reason why I started and discovered the ctyi programme is because of the lack of interest that the school were showing in her. Her teachers realised that she was gifted so she was never involved in a reading group or anything. She was just left to do her own thing – Chloe you go and pick a book, Chloe you go and do something, Chloe you go and help somebody else. This is the kind of attitude they had with her and it happens to them all
I	In school, would she be the best in her class at English?
P1	Yes.
I	And what about in Maths?
P1	She's extremely good, she's above level at her maths . Maths would be her least confident subject. In saying that, she can do algebra, she can apply, she knows there's ten digits and there's only four things you can do with them and she can apply her knowledge to negative numbers and stuff in algebra which she hasn't learned in school. When it comes to multiplication and division, which a skill the teachers aren't teaching her, she's getting a bit lost in it, it's not being explained to her
I	Would there be other students in the class that would be better than her at maths?
P1	At the same level as her. But she sees it as a weakness, because she excels at everything else
I	Does she like sports?
P1	Not at all, not sporty at all, although she's a great swimmer. But she doesn't go in for sport
I	Your child attends CTYI, can you tell me a bit about her ability?
P1	She's very comfortable with it.
I	Does she like studying on her own, or does she prefer working in groups?
P1	She likes studying on her own
I	What's your perception of the term "gifted"?
P1	I'm probably a wee bit different from your other parents because I've actually done my masters in gifted education. So my perception of it

was that she was born with an ability to see things in a different way than other people, to want to know the reasons behind things – you just can't be told that something's there and that's just the way it is, you need to know why it is, you need to touch it and smell it and see it. She also feels that she's here for a reason, that she's special. Of course, all children are special and you tell them they're special , but she sees herself as doing something in the future for the good of society. This is how she sees herself

I   Can you describe the classes that your child has attended at CTYI?

P2   This is his first time here, and Kevin will be eight on Friday
I think he's satisfied, I think he's happy. I don't know if he understands fully everything. I think academically he's finding it difficult in so far as it's a challenge, and that's good for him

I   What's his attitude towards attending the classes?

P2   He loves to come here, he wants to come here . Extremely positive

I   What ambitions do you think he might have had in coming on a course like this?

P2   I don't know. I think he knew some people who went here, he liked the idea. When he goes to a library the first place he goes is the reference section , so he likes learning. I've been in college for the past four years, so he likes the notion of going to college like Dad, so he's been extremely positive about coming here and he just wants to learn. He picked chemistry, I don't know why – there's nothing at home to encourage him towards chemistry, he picked it and he seems to like it. How much is going over his head and how much he's understanding it I don't know

I   Can you tell me a bit about your child's experiences at school?

P2   Some things he finds hard...no, there's a couple of things he finds hard, but I think that's because he's switching off; spelling, reading, he finds that so easy . He says he finds maths hard, but when he gets a worksheet he just flies through it and I don't think he's challenged sufficiently in school

I   What's his attitude towards attending school?

P2	It's about average, somewhere in the middle. When he gets up in the morning he doesn't want to go to school, but then he's out the door and when he comes back he tells you what he did that day. I think he's fairly normal from that perspective, I didn't want to go to school
I	What would his favourite subject be?
P2	Probably maths. I know he says he doesn't like it, but I think that's because he's not challenged enough. He likes Maths
I	Does he get much opportunity to study maths in school?
P2	For him, probably not
I	In maths, how would you rank him in his class?
P2	I don't know. He's in a very bright cohort of students and I think the school recognises that as well. There's about 13 in his class and they're all fairly bright, but how bright as regards maths I'm not sure
I	What about English, would he be good at that?
P2	He's very good at that and he'd probably be one of the top three, if not the top person in his class
I	And what about in languages?
P2	Irish I don't know, because we don't get enough feedback from the school, or from him. But he's interested in, say, French, because I've been to France. I don't speak French but I can pronounce the words I see on the page and he's fascinated by that type of thing and he will try and puzzle things out . Not translating, he'll try and puzzle out how to say it , so he's fascinated by that type of thing.
I	Does he like sports?
P2	Not particularly. If he were to do a sport for his own satisfaction I would encourage him towards an individual sport like athletics. He plays soccer, but he goes for the social aspect of it and he'll stand and let the ball go by him if he's chatting to somebody
I	Your child attends CTYI, can you tell me a bit about his ability?
P2	I think he's comfortable with his ability. As I said, he says "I'm no good at maths", but partly I think that's because he's not challenged sufficiently at school in maths. His overall ability I think he's happy, but I think he needs more than school can give him
I	Is he able to work on his own?

P2	Yep
I	Does he prefer working on his own or in groups,?
P2	I think he would like to work on his own. It'll depend on what he was going to do. I mean, I've frequently said "There's your homework off you go and do it" and he'll come back to me when he's finished cos I've two smaller children that need to be looked after , but he'll go off and do it, but whether he'd like to be in group is another question
I	What do you think about the notion of "gifted"?
P2	I have no problem with that concept. Basically I 'm a trainee teacher and I see a bell curve and there's kids who are gifted and there are kids who aren't and there are kids who fall in the middle so I've no problem in seeing some kids as gifted and some kids as not, it's just the way they are
I	Would you define Kevin as gifted, in that context?
P2	I would, but I'd have to acknowledge bias. But I've another son who I wouldn't, yet, classify as gifted. But yet he shows similar spark as Kevin, but I wouldn't necessarily put him forward for this programme just yet
I	Can you describe the classes that your child has attended at CTYI?
P3	Up until this one, chemistry, she has been happy, but she hasn't been happy in chemistry. She felt that chemistry, at the beginning, was too difficult and they weren't getting a chance for things to be explained. It got a bit better as it went on, I don't think it's her, although maybe that's just me, but I think it's the class. The way it was taught this time around I don't think was the best
I	What's her attitude to attending the classes here?
P3	Definitely positive, she looks forward to it
I	What does she hope to achieve at the start of a course?
P3	I don't think she has ambitions coming on a course like this, she's only nine. We go through the list and say this'll be fun or this'll be great fun
I	So is it more academic or is it social?

P3	I would want her to come because of academic reasons, but to her it's a social thing especially because there's boys in the class. But she's enjoying it because after the class when she goes home she's talking more and she'll get into things more than she would have done before. Like when she's having a break from this she'll revert back to talking just about her schoolwork, it's definitely broadening her, it's opening her up definitely
I	Can you tell me a bit about your child's experiences at school?
P3	She breezes through school, she would find school too easy. There'll be times at school where she won't try, and she'll drop back because of that, because she doesn't have to put an effort into it
I	What's her attitude towards attending school?
P3	She likes going, she does. She's in a lovely school, and she has a lovely teacher and there's lovely children in her class, so for that reason she likes going
I	What's her favourite subject, do you think?
P3	English
I	And is she the best in her class at English?
P3	Yes
I	What about the other subjects, like Maths?
P3	She's not too fond of maths, maths is one thing that she might have to work on. Although her teacher in school says that she's in the top two or three in the class, she scored 98 in her recent test in maths, which will give you an idea. She's doing very well in maths, but it's definitely not her favourite subject
I	What about in Irish?
P3	She likes Irish, she picks up languages quickly
I	Is she one of the best in the class in that?
P3	I think so, yes
I	Does she like sports?
P3	She likes sports, but she's not very sporty, she doesn't realise that, but she's not a bit sporty
I	But she participates?

P3	Oh yes
I	Your child attends CTYI, can you tell me a bit about her ability?
P3	She's getting there. She's not a confident little girl. Every year she gets more confident, but she's not too confident now
I	Is it because things are coming a little too quickly to her?
P3	No, it's more of a social thing. She just needs to find her place and slowly work into things
I	Can she work on her own?
P3	That's no problem to her, she'll happily work on her own. She'll work in a group as well, but she'll work on her own and get into it and do something by herself no problem
I	So she can work in groups?
P3	She can work in groups, yeah, but I think she likes being in charge of the group
I	So which do you think she'd prefer: On her own or in groups?
P3	It's a tough one, like for instance she did one in school recently on Brazil and everyone had to participate. She had one little article, but she took the rest of it home for a week and completed the rest of it on her own. She likes the social part, she likes being with her friends but it has to be done a certain way, her way
I	What's your feelings of the term "gifted"?
P3	Well I think every parent finds things that their child is gifted at, I mean every child is gifted. I found it great to have her assessed here and have her classed as gifted because I've other children and I could see that Naoise is really bright and she's doing well and she's gifted so these other kids are doing well, it's not they're fault they're not doing as well. So to class her as gifted is great
I	So you would consider her to be gifted?
P3	Yes

I	Can you describe the classes that your child has attended at CTYI?
P4	Very satisfied. She likes them
I	What is her attitude to coming to the classes here?
P4	Yeah, grand. Not a bother
I	Before she started, what would she hope to achieve by coming on a course like this?
P4	I think she was hoping for a chemistry lab, with white coats and bubbling jars. That was, I think, her idea
I	Do you think her ambitions would be academic or social?
P4	Academic, I think. Socially, outside of here, she's a busy bee, so I would say it was more academic, to get a taste of the chemistry
I	Can you tell me a bit about your child's experiences at school?
P4	They are very good. She really likes school.
I	What's her attitude towards attending school?
P4	Very positive
I	And is it the same as here, or would she be more keen to go to school or here?
P4	Oh I'd say she'd be more keen to go to school, but like, if I told her she'd have to go to something else on a Wednesday she'd be disappointed, but she would go to something else. She likes coming here, but if something else came up she wouldn't mind if she missed it. She loves school she wouldn't miss that
I	What's her favourite subject in school?
P4	Maths, I'd say
I	In school, would she be the best in the class, or where?
P4	I'd say she'd be up in the top four or five
I	How is she in English?
P4	Comprehension is very good, and writing and reading, yeah she'd be very good.

I	Would she be the best in the class?
P4	There's a few of them that would be the top five or six in everything, and she's one of them. Thinking back to what the teacher has told me there's nothing that she would have a problem with
I	Does she like sports?
P4	She does badminton, gymnastics and swimming
I	Your child attends CTYI, can you tell me a bit about her ability?
P4	I think she is comfortable. I've never discussed that with her, to be honest with you
I	Now we would ask the kids is we would ask them if they always put their hands up if they know the answer, and sometimes they say no because they don't want to always be the only one with the answer
P4	That hasn't ever come forward, and certainly the teacher never said that to me
I	How is she at working on her own?
P4	She's grand. She doesn't mind it, she just gets on with things
I	And what about working in groups?
P4	Equally good, I would say
I	And which do you think she would prefer?
P4	If her friends are in the group, I'd say she'd like that better. But she works well on her own at home – she's the youngest of four and there's a bit of a gap, so she's kind of used to being on her own in some ways. But if her friend was in the group, she'd jump into that
I	Would she be the leader in a group?
P4	No, I don't think so
I	What's your opinion of the term "gifted"?
P4	My opinion has changed over the years, because I've had nieces and nephews and my own kids come here down the years. And what might have started out as gifted as a special talent to be awed, I now feel that for some kids it can be a burden, I just know from other kids. I feel that she might not benefit as well as other kids because socially she's fairly fulfilled, with sports and everything. But if I had a kid who might be

very bright in school, but socially might be challenged, I feel this would help them. But my idea of being gifted has changed, where as when I started out I would have been in awe of the kid, whereas now I realise that can be a cross to bear

I   And would you classify Alanna as gifted?

P4   No, I wouldn't actually

I   And why would that be?

P4   Because I think she's kind of an all rounder at everything, and all my other kids are probably the same.

I   So you would have a negative connotation of "gifted" in a context that it can have problems associated with it, and that might be one of the reasons that you wouldn't classify Alana as gifted?

P4   Maybe, I didn't think of it like that. I didn't think of her as gifted, in fact I was surprised that she got through the assessment

P5	Can you describe the classes that your child has attended at CTYI?
P5	I think he's thoroughly enjoyed it, but we specifically waited until the boys were 10 or 11 and didn't send them any earlier, even though it was suggested they might have been candidates earlier
I	Why would that be?
P5	Because we thought they would get more out of it, and we wanted to get them established in sports and other things like scouts and a few other things. And if it had been nearer, as well, because it's a little more difficult when they're smaller
I	What is his attitude to coming to the classes?
P5	They're positive – 'hurry up we're going to be late'. Rushing in from school and ditching all his school stuff, yeah, no problem at all
I	What do you think he hoped to achieve by coming on a course like this?
P5	I don't know, to be honest. Part of it would be down to his sibling, and wanting the same thing. He's very varied interests, he's fascinated by a lot of things and he likes to know, and that's it. He wants to do all sorts of things – he wants to do debating, and lots of other things as well, it's not just the sciences
I	Would what he's hoping to achieve be more social or academic, do you think?
P5	I think it would be more academic, because I don't think...he's a very sociable child, and there wouldn't be any bother with him being involved socially with any group you'd put him into, but I don't think he came expecting to be a social outlet, I think he came expecting it to be a class. But he came back saying it's different from school, that it was more relaxed and you could interrupt or ask questions. It was different, the setup was different. So I think he came for the academic and expected it to be that way, and was very happy when it was more than that
I	Can you tell me a bit about your child's experiences at school?
P5	I'd say it's not bad, but then he's not fond of his teacher this year which is the first time that's ever happened - both of them have always got on up until fifth class, so maybe it's just a thing with fifth where they take a jump and the teacher is tougher and the school is tougher. I don't know, I haven't thought about it to be honest with you. He comes in, he gets the stuff done, and then he goes out. He's a social kid so it's all about getting it finished and moving on. But if he gets project work

and things he can get stuck into and do research on and really add his own bit to it he'll spend a long time at it.

I   What's his attitude towards attending school?

P5   Not negative, but he would give out a little bit this year, but that has to do with the year that's in it. Previously he's been fine, and even at that it's not much, and it's only started lately, and that's probably because his brother's gone to secondary school and is already finished, so he has to get up in the morning and his brother doesn't

I   What is his favourite subject in school?

P5   I don't think he has one. I think he just gets stuck into them all. He's doing Italian, which he likes, which is very different. I think it grasps him because it's different and he's learning something that nobody else is learning

I   How would he be ranked in his class in subjects like maths, English and Irish?

P5   I'd say he'd be in the top 3, but it's not something they discuss. They do know he's coming here and all of his teachers say he's very bright. When they do the drumcondra test they tell you he's in the top percentage, but they wouldn't discuss it in relation to other children in the class

I   Is there other children in the school who attend here?

P5   Yes, on a fairly regular basis, I think. There's one girl in his class, and there was also a chap in raymonds class when he was here, and I know there are people, I think two, of his class who have come

I   So he's in an academic class?

P5   Yes, but it's a small school, so if one or two of them go off to do things like that you know fairly instantly and you can pick them out. It's a single stream school and there was 27 in Raymonds class and 24 in Conors, so it's very easy to know what's going on with people

I   Your child attends CTYI, can you tell me a bit about her ability?

P5   I think he is happy with it. I think he's a child who doesn't always know he has it, which isn't a bad thing most of the time. He would say to you 'do you think I could do that?' and I'd say to go on and give it a go and then he's delighted with himself when he does it. He would ask often 'do you think I'm clever enough for that' or 'am I strong enough for that'? But I think he's happy enough when he does things, he doesn't always have the confidence though.

I	Is he comfortable with working on his own?
P5	Yes, he gets stuck into things and is very comfortable with it. Having said that, if it's something he doesn't want to do and he has absolutely no interest in it, like anybody else he'll find ten other things to do instead of it, and eventually if you say to him that he'll have to do it anyway he will get it done then
I	Is he comfortable working in groups?
P5	He's very good
I	Would he assume a leadership position in a group?
P5	Invariably he would be the group leader, or the scout leader or whatever.
I	Why do you think that is?
P5	It's just his character, it's the type of character that he is. I don't know, again I've never analysed it to that degree, but I would find that is how he is. He's an imaginative kid, so he'd always find something to do, and when he finds something to do others just either join in or follow
I	What's your feeling about the term "gifted"?
P5	It's not one I like in particular, because I think everyone's gifted in their own way. However, I don't know that there's really another word to describe somebody whose overall talents are at a certain level. I suppose it describes it very well but there's a label, a negative part with it.
I	From your understanding of it, would conor fall into the gifted category?
P5	Yes, I probably would. But we came to ctyi through andrew conway, so we had both children assessed on an overall level and had a discussion, so I formed an opinion based on an experts opinion where they said he was good at this, this and this, and a general all-rounder. So I suppose yes is the answer to that

I	Can you describe the classes that your child has attended at CTYI?
P6	He is very satisfied. It challenges him a lot more than school. Initially he took writing which would be one of his favourite subjects and he really enjoyed it. Then he took marine biology and I think he learnt a lot.
I	What's his attitude to attending the classes here?
P6	Initially he was a little apprehensive but from after the first class it has been very positive, he loves it
I	What does he hope to achieve at the start of a course?
P6	He really wants to learn something new and to gain more knowledge. He loves facts and figures.
I	So is it more academic or is it social?
P6	I think when she started it was academic as he didn't think school was too difficult. Now though she likes the social side as he has made friends with other children in the same situation as him. I think that was unexpected but added to the experience.
I	Can you tell me a bit about your child's experiences at school?
P6	He's not very satisfied. He finds things a little easy. He's not really a complainer though, he just gets on with it. All I hear at parent teacher meetings is how good he is in class but sometimes he would come home a little frustrated that he didn't do much on that day.
I	What's his attitude towards attending school?
P6	It's quite positive. He wants to learn new things so he likes school because of this. However she can be a little sad when he thinks this doesn't happen
I	What's his favourite subject, do you think?
P6	English
I	And is he the best in her class at English?
P6	I would think so, yes
I	What about the other subjects, like Maths?

P6	He likes Maths as well but I think he sees it as something you do in school. He would never do a puzzle book at home although he would read lots of books, mostly novels though. The teacher tells me she is one of the best at Maths as well.
I	What about in Irish?
P6	He likes Irish, and he tries in this subject.
I	Is he one of the best in the class in that?
P3	Probably not as there are a few native speakers in the class. He doesn't mind this though.
I	Does he like sports?
P6	Yes, he loves them, he plays on a football team and he's pretty good.
I	Your child attends CTYI, can you tell me a bit about his ability?
P6	I think he is comfortable with it.
I	Why do you think this?
P6	Well we've always encouraged him with anything he has been interested in and I guess he realised early on in school that things came to him a little quicker than other students. We have tried to tell him that this is actually a good thing.
I	Can he work on his own?
P6	This has improved since he started at CTYI. Working on projects there has encouraged him.
I	So he can work in groups?
P6	He can but he ends up doing all the work.
I	So which do you think he'd prefer: On his own or in groups?
P6	Previously I'd have said groups but lately he's getting better on his own. I'm not too worried though as he is good socially.
I	What's your feelings of the term "gifted"?
P6	I'm not altogether too comfortable with it. I think it has elitist connotations. I can see how it applies to Beethoven and Einstein but maybe I'm confusing it with genius.

I   So you would consider him to be gifted?

P6   If it means someone who is academically in the top 5% of the population then yes as I think he falls into that category and he is lucky because of it. If it means someone who breezes through school and life without any struggles academically because they are so bright then no, at least I hope not as that would be difficult for him.

I   Can you describe the classes that you have attended at CTYI?

S7   They're interesting, fun and interactive. You can really participate and discuss within   them. You can make your point or have your say without being judged on it.

I   What's your attitude towards attending these types of classes before you come?

S7   Looking forward to it. I like to think of it as a social thing and the classes are   something I don't mind doing, I enjoy doing...

I   So you have a positive attitude before attending?

S7   Yes

I   And what would you hope to achieve academically by attending these type of   classes?

S7   There is no set goal but I would like to know that I've left the class having learned or   gained something that I can use or repeat later on.

I   What would you hope to achieve socially by attending here?

S7   Just make friends and such, the same as in any social situation really.

I   Does the course have an impact on what you're thinking of studying at college?

S7   I think so, I had a few things in mind and getting the chance to have an in depth look at it before you do it is really helpful so I can see what interests me.

I   Can you tell me a little bit about your school?

S7   I love school

I   Ok, and what's your attitude towards attending school? Is it positive?

S7   Yeah, I really enjoy it.

I   And do you feel academically challenged ay school?

S7   Yes actually, I'm lucky enough to get on well in each subject and with the teachers   but because it's new stuff I'm still learning rather than sitting staring blankly into   space.

I   And what's your favourite subject at school?

S7   Probably business and languages.

I   Do you get enough of those subjects in school? Would you like to do more of them?

S7   I like the balance as well because I tend to like all the subjects.

I   Is the opportunity to study something that you wouldn't normally do at school an   incentive to come to CTYI?

S7   Yes. One of them.

I   What about your ability in relation to other people at school? In subjects that you're   good at do you think you're better, worse or the same as other people in that subject?

S7   I'd say probably better than a good few at them because mainly the subjects that I really like are influenced by the fact that I'm good at them. They would be my best subjects as well as my favourite subjects.

I   And what about subjects that you're not so good at?

S7   Probably somewhere between "better than" and the "same as". There aren't any   subjects that I'm bad at, just not as good as my best.

I   Are you still better than your peers in the subjects you're not so good at?

S7   Overall I'd feel I'm better than most of them..

I   But you would feel you're better at certain subjects anyway?

S7   Yeah

I   And what about sports?

S7   I'm probably the same as most people.

I   Do others from your school attend here?

S7   Yes

I   Who decided whether you should come here this year?

S7   Me

I   And when you the first time?

S7   My Mammy

I   So that changed over the year?

S7   Yes

I   You attend CTYI, can you tell me a bit about your ability?

S7   I'm very comfortable with it.

I   What's your understanding of the term "gifted"?

S7   Something you have a talent for, not necessarily academia but just something you   have a flare for.

I   Do you consider yourself gifted?

S7   In the way that I defined it, then yes.

I   In school, if you know the answer do you put your hand up?

S7   Yes. I have no problem in showing that I know the answer.

I   Do you think that "gifted" is a positive or negative stereotype?

S7   I would think of it positively but in terms of academia and even CTYI it can be   negative because there are other ways to be gifted.

I	Can you describe the classes that you have attended at CTYI?
S8 taking an	The classes here offer more detail. In school it's much broader but here aspect in detail is challenging and makes it far more interesting.
I classes?	Before you come here, what is your attitude to attending these type of
S8 which is what more enjoyable.	Without the social aspect, it sounds like a Gaeltacht but with friends brought me here the social aspect makes the academic side
I	What would you hope to achieve by coming here?
S8	An idea of what I'd like to take up in college.
I	What about socially?
S8	Make friends but also make sure that no feels left out of anything.
I	What do you like about the classes?
S8	Very interactive. It's very easy to participate and ask questions without being labelled. It's easier to talk in situations like that.
I	Can you tell me a little bit about your school?
S8	It depends on the classes. School in general can be a bit tiring.
I	What in general is your attitude towards attending school?
S8 let it end".	I'd call it indifferent. By the end of the year it's moving towards "just
I	Do you feel academically challenged in school?
S8 languages aren't	It's not because the subject is difficult it's more that subjects like taught well in schools.
I	What's your favourite subject in school?
S8	Probably Maths or English.
I time to study	Do you get enough of those subjects in school or find you have enough them?

S8   Well English and maths are both heavy-loaded on the study side in terms of quotes   and formulas. They both require a lot of study and a lot of outside knowledge to get   the full marks.

I   Is the chance to study something you can't do in school an incentive for attending   this program?

S8   Definitely. It's refreshing as well as interesting.

I   In subjects that you're good at how would you rank yourself in relation to your   peers? Would you be better, the same as or worse than them?

S8   I'd rank myself as an 8 out of 10. My school is streamed so I would be in the top   class for maths.

I   And what about subjects you're not so good at? What subjects would they be?

S8   Irish and French. Languages outside of English.

I   Are you in the top stream for those classes?

S8   Irish- I'm doing ordinary level and in French I'm struggling with higher level.

I   So how would you rank yourself then in relation to your peers in those subjects?

S8   Very low. Around 3 or 4 out of 10.

I   And what about sports? Do you like sports?

S8   I'm not against competitive sports, I used to play rugby for three years but I'd rather   take up sports like archery, more hobby based.

I   What about sport in terms of your appearance in school? How would you rank   yourself?

S8   In the middle.

I   Anyone else from your school attend here?

S8   Yes, around 5 or 6 people.

I   In maths would you consider yourself the best in the class? How would you rank   yourself?

S8   About 5, in the middle.

I   You attend CTYI, can you tell me a bit about your ability?

S8   I wouldn't call myself gifted, more strongly educated.

I   What's your understanding of the term?

S8   To be born with just a natural talent. Quick to understand new things.

I   What about your own ability? Are you comfortable with it?

S8   In a broad sense yes, but I'm not very ambitious when it comes to studying for school. If I put in more effort I'd be better at Irish and French for example.

I   Are you happy with your ability as it is or is it something that you wouldn't talk to   many people about?

S8   I wouldn't say I'm frustrated with my ability, I think there's room to get better.

I   In school would you put your hand up if you knew the answer to a question?

S8   I'd do it but not repeatedly. If it's just you putting your hand up over and over then its   likely to get you singled out.

I   Can you describe the classes that you have attended at CTYI?

S9   Yes, the first course I did was philosophy and that blew my mind compared to what   I'd been doing in school. It was great.

I   When you're here do you find yourself challenged at CTYI?

S9   Most of the time yes, now that I'm a bit older a lot of the physics experiments we're   doing I've done before for the Leaving Cert

I   What do you like about the classes here?

S9   The way its taught. Being taught by lecturers who have just done a masters degree.   They are younger than most school teachers and teach as though they were a college   lecturer. It suits the way I learn.
I   And what's your attitude towards attending these types of programmes?

S9   Well I had to work to get in this time, my parents wouldn't pay for me.

I   So you're motivated?

S9   Yeah I'm motivated.

I   What would you hope to achieve by attending this type of programme?

S9   By doing a lot of courses that could be put on a c.v. or college application it shows   that I'm good academically and single minded towards a certain part of academia.

I   What would you hope to achieve socially?

S9   When I first came I was very quiet but what happened over time, that I didn't think   would happen, is that I became a lot more confident thanks to the course.

I   Can you tell me a little bit about your school?

S9   I like it because of my friends there and the extra-curricular activities. Class work   itself can be a bit of a drag.

I   What about your attitude towards attending school?

S9   I have to attend school. I've set goal of 600 points for myself so I have to attend to   achieve that.

I   Do you find yourself academically challenged in school?

S9   More so in the Leaving Cert than the Junior Cert but no so much that I'm suddenly   madly interested in class.

I   What's your favourite subject in school?

S9   It's either maths or physics. The physics teacher is very sound and relatively old so   he is able to joke in class and doesn't need to stick to rigidly to the textbook since he   knows it all. I enjoy doing maths, my brain is very mathematical.

I   Do you get enough of your favourite subjects in school? Would you like   opportunities to study more of them?

S9   Because of the choice system I couldn't do all the subjects I wanted to for the   Leaving Cert so I ended up doing classical studies instead of technical graphics. I   would have preferred to do tech graphics rather than another English based subject.

I   Is the chance to do something you can't do in school an incentive for attending CTYI?

S9   Definitely yes. School is ridiculously easy whereas CTYI is challenging.

I   In subjects that you're good at how would you rate your ability in relation to your   peers at school?

S9   I've a bit of a reputation for being the best guy in the year at maths subjects. I   wouldn't be the most intelligent overall but definitely in the maths subjects.

I   And what about the subjects you're not so good at?

S9   I'd be above average but definitely not the best. I'm in the first class but nowhere near   the top of that class.

I   And what about sports?

S9   I've played rugby since i was 9 and my school has such a strong rugby tradition so if   you want to play you'll play.

I   How would you rank yourself sports-wise?

S9   Well...a bit below average...

I   When you came here initially, whose decision was it?

S9   I came through the younger program which my dad saw in a newspaper. My first   year in the senior cycle i was a commuter but when I

found out about the residential program and how much fun it was after that it was my own decision.

I   Do others from your school attend here?

S9   A couple from the year below me.

I   You attend CTYI, can you tell me a bit about your ability?

S9   Yes, when I'm at home doing my own research but when I come here if I go to write something on the board I look to see if the instructor approves. I'm still slightly unsure of the way my thought process works. To be gifted means having an higher IQ or something like that but a better ability for learning as opposed to other people. I prefer to think of it more like a talent, the way sport is a talent.

I   Would you consider yourself academically gifted?

S9   Yes

I   Are you comfortable with that term?

S9   Oh yeah, gifted is fine.

I   Are you comfortable with your own ability in general?

S9   Yes

I   In school, are you comfortable putting your hand up when you know the answer to a question?

S9   Yes

I   And would you be comfortable continuously doing that?

S9   Yeah, I would. All the classes are streamed and I'm in all the top classes so everyone is as ambitious as me to do well.

I   Can you describe the classes that you have attended at CTYI?

S10   They are great. We're doing a lot of scientific experiments and we've gone to the library twice to do our own research which is a first for us.

I   What is your attitude towards attending these classes?
S10   So positive. I've never not wanted to go to a class in any course I've ever done   particularly psychology.

I   What do you like about the classes here?

S10   This year I like the dynamic within the class. There're are strong personalities but   also people who wouldn't be very outspoken but have good things to say. The   discussion in the class in brilliant. Everybody gets to give an opinion.

I   What would you hope to achieve academically by coming on to a course like this?

S10   We're doing a report and I'd like to give a good one because I always felt that once   you do a project in CTYI you know so much more about it. In general it gives you   such a good opinion of the topic and an insight for what you would like to do in   college.

I   And what about socially?

S10   New friends, everybody loves to make new friends and I've made some great new   friends already.

I   Can you tell me a little bit about your school?

S10   I'm pretty happy at school.

I   What is your attitude towards attending school?

S10   I'm positive towards school. I do well in school, I study so it's a lot easier for me. I'm   a prefect now so I have to be enthusiastic.

I   Do you feel academically challenged in school?

S10   No, not particularly. The only subject in school I find I have to work at is maths.

I   What's your favourite subjects in school?

S10   My favourite subject is music but academically it's probably economics.

I   Is the chance to study something you wouldn't get to study in school one of your   incentives for coming here?

S10   I have many reasons for coming to CTYI but that would definitely be one of them.   It's such a good opportunity to get to know subjects. I did speech therapy a few years   ago and decided for me what I want to do in college.

I   In subjects that you're good at would you say that you are better, the same as or   worse than people in your class?

S10   In most subjects I'd say I'd be at the top of the class. I tend to score highly in most   subjects.

I   Would you still be better than most people even in subjects you're not so good at?

S10   Maths would be the only subject I find challenging. I generally get Bs in maths. I   would say that I work harder than a lot of people not necessarily that I'm better. I'd   say i'm average verging on better than most people.

I   You attend CTYI, can you tell me a bit about your ability?

S10   I am comfortable with my ability because I feel that I can help other people.

I   What's your understanding of the term gifted?

S10   I think gifted means that you excel in something. It might be academically,   intellectually or artistically. CTYI means that we're gifted academically, so to speak.   It means that we have a gift, not that we're special or we need special treatment.

I   Would you consider yourself academically gifted?

S10   I would, yeah.

I   In school if a questions asked would you put your hand up to volunteer the answer?

S10   Yeah.

I   Would you continuously do that if you were the only person?

S10   I would to a certain extent but then I would feel that I shouldn't have to be the only   person to answer.

I   Do other people from your school attend here?

S10   There has been a couple from my school but not as many as I would've liked. We had   the poster up for a while but this year I'll kinda be encouraging it.

I   Would you consider yourself to be the best in your class overall?

S10   Em..one of the top, yeah.

I   Can you describe the classes that you have attended at CTYI?

S11   The reading is quite tough because it's college level reading. And
                    because it's legal reading there are a lot of terms you mightn't have encountered   before. You also have to think differently than for schoolwork.

I   What is your attitude to attending the programme before you come?

S11   This year in particular I was so excited to come back as I was a nevermore last year.   But I've always been really excited about attending because you make loads of   friends from all over the place.

I   What do you like about the classes from an academic perspective?
S11   There are things you never get to experience in school such as human rights law.   There is more discussion, more thinking and a more interactive atmosphere than in   normal schools.

I   What would you hope to achieve in general by attending this course?

S11   This course will have given me a good idea about what I want to do.
           After doing   these courses I know that law is something I would want to do.

I   Is there anything you'd like to achieve socially?

S11   I've made a lot of friends here already and I'd like to be able to hang on to them. It's   good because you get to meet people form all over the country and America. It's a   really good way to meet new people.

I   Can you tell me a little bit about your school?

S11   I do like school. It's a good school and I fit in fairly well. My teachers are good. I've   a lot of friends in school and plenty of extra curricular activity.

I   What's your attitude towards attending school?

S11   I work when I get to school. I mightn't have to work as hard as other people but I like   to work to keep my grades up.

I   Do you feel challenged at school?

S11   Sometimes. In some subjects that are slower paced I'm just sitting there but fast   paced classes like maths are challenging. I chose physics because I thought it'd be   more challenging than other subjects.

I   What would your favourite school subject be?

S11   It would probably be English. I love to read and think critically about the books that we read. I love to write as well.

I   In school do you think you get enough time at that subject? Would you like more of it?

S11   We do get a lot of time at it but it would be nice to have more English.

I   Is taking a subject that you can't study at school one of your incentives for coming?

S11   Well definitely one of them, yeah. We're really lucky here because we get the chance to study those subjects like legal studies, philosophy and journalism.

I   In subjects that you're good at, with relation to your peers in school, would you say you're better, worse or the same as them?

S11   I'd probably be worse than a lot of people in Irish, I struggle with it. In English I'd be top of the class a lot.

I   What about sports?

S11   I play hockey and I'm ok at running but I wouldn't be the best at sports at all. Probably the lower end of middle.

I   Do others from your school attend here?

S11   Yeah, there are a few people but no one from my year. There was 2 girls from the year below me and 4 from the year above me.

I   Would you think of yourself as being the best in your class in school?

S11   Well I wouldn't like to think like that but I'd be fairly ok. I do get good grades a lot.

I   You attend CTYI, can you tell me a bit about your ability?

S11   I'm fairly comfortable with it. It can be a bit awkward sometimes, when people ask you "how do you know that?"

I   In school if the class gets asked a question would you put your hand up if you knew the answer?

S11   Yes.

I   5 minutes later would you put your hand up again?

S11   Yes.

I it relates to	What's your understanding of the term gifted in general, not even how yourself?
S11 art or singing	I would usually think of gifted as someone who is talented at music or or something like that. Or they're an absolute genius.
I	Would you think of yourself as academically gifted then?
S11 gifted.	I'd say I'm lucky with everything. I do well but I wouldn't say I'm
I	Would you be uncomfortable with that term?
S11	I wouldn't be comfortable with describing myself as gifted.

I   Can you describe the classes that you have attended at CTYI?

S12   Yeah, they are very interesting. I've done science and English courses before so I decided to try something different.

I   What is your attitude towards attending the class like before you come here?
S12   I look forward to the classes. You're treated as a student rather than a kid.

I   What do you like about the classes?

S12   I like the way they're more lecture based. They're also more open to discussion which   is better than school.

I   What would you hope to achieve by attending these type of courses?

S12   With the science and English I was hoping it'd help me in school. With this i was   hoping to just get a taste for it. It's not offered in our school up to the Junior Cert so I   figured I'd try it here.

I   Can you tell me a little bit about your school?

S12   Yeah I enjoy school. I was in St. Michaels for first year but then moved to gonzaga   which I really enjoy.

I   What's your attitude towards attending school in general?

S12   I'm just after finishing transition year which was ok. It wasn't well organised but I've   enjoyed the first 3 years anyway. I like school though.

I   Do you find yourself challenged academically in school?

S12   In some classes. I find maths challenging, English not so much. It's more maths and   sciences that I find challenging. I enjoy the challenge though.

I   What would your favourite subject be?

S12   English would be one of my favourites, geography as well.

I   Do you think in school you get enough time to do those subjects or would like to do   more of those?

S12   Last year we only got to do modules of those classes but from first to third year there   were enough of those classes.

I   Is the opportunity to study something that you wouldn't normally do in school is that   one of your incentives for coming here?

S12   Yeah definitely this year and in previous years as well, especially with novel writing.
          I've always had an interest in writing. I enjoyed the zoology course in my first year.

I   In the school subjects that you're good at, English and geography, how would you   rank your ability in relation to your peers?

S12   In English I'd say I'm probably better than the average person, same with geography.   In maths I'd be a bit above average. There are people better than me in science. My   weakness is probably languages.

I   What about sports?
S12   I played rugby up until last year but the attitude was a joke so I joined a gym instead   and went running.

I   You attend CTYI, can you tell me a bit about your ability?

S12   I'm pretty good, not amazing, but probably better than the average person at most things.

I   Do other people from your school attend here?

S12   There is one from my year and one from fourth year.

I   And would you consider yourself the best in your class?

S12   In certain subjects. I'm near enough in English and geography. Maths, I'd be near the   top but languages I wouldn't be.

I   Are you comfortable with your ability?

S12   Yeah, in most subjects. I went for grinds in Irish last year but still didn't do to well in   that subject for the junior cert.

I   If you're in school and the class is asked a question and you know the answer. Would   you put your hand up?

S12   Yeah, I would.

I   What's your understanding of the term gifted without it being in reference to   yourself?

S12   I'd link it mainly towards intelligence and academic achievement. It's an overall   ability.

I	Would you consider yourself academically gifted?
S12	I'd like to think so. I've got my strengths and my weaknesses.
I	Are you comfortable with the term gifted?
S12 say what I'm	Definitely, all my friends know I'm here. It isn't like I'd be ashamed to doing here. I like it.

I   Can you describe the classes that your child has attended at CTYI?

P7   Yes. She directed a play for one of the drama classes without any previous   experience of doing that. She has done drama for 3 years now but I was still   surprised she undertook the challenge of directing the play.

I   Before she attended what would have been her attitude towards attending a   programme like this?

P7   She was very enthusiastic to attend. Even after the original assessment she wasn't   deflated she was eager to try reattempt all the questions in her own time. She was   motivated to try and qualify again this year. It was very positive and after she looked   at the website she was sure she wanted to attend.

I   What would you hope she might achieve from attending a program like this?

P7   Spending a lot of time with other people her age and becoming independent and self   motivated. Something like this will allow her to show her creative side.

I   Can you tell me a bit about your child's experiences at school?

P7   Yeah, she likes school. She has friends in school but I sometimes think that the very formal   approach is a bit constrictive. She is very outspoken without being disruptive. She is   very enthusiastic.

I   What's her attitude towards attending school?

P7   It's very good. She was very enthusiastic and she chose which school and subjects she preferred so she has always been very focused on that. It's a positive attitude to school.

I   Do you feel that she is challenged academically in school?

P7   Yes and no. In maths when she finishes ahead of the other students she tends to   daydream which causes a loss in focus within the class. She felt that if she'd have   been challenged more in the class it would have made her work harder.

I   What's her favourite subjects in school?

P7   Maths and science. She also enjoys writing in English.

I   In school does she get enough time to study those subjects?

P7   For the Junior Cert it wasn't a problem but I would be concerned for the Leaving   Cert. She wants to carry on doing physics but because of

budget cuts the physics class will be affected. There aren't enough subjects choices within the Irish education system.

I   How would you rank her in subjects that she's good at in relation to her peers at school?

P7   She wouldn't be the best at maths. She tried to change to a more challenging class but didn't do well enough in the exam. She gets Bs in maths whereas science she always gets As.

I   What about sports?

P7   She's not very athletic but she is part of a soccer team. It's mostly for the social aspect with her friends. She enjoys swimming. She is not a driven athlete but is quite happy outdoors.

I   Your child attends CTYI, can you tell me a bit about her ability?

P7   With her, she will tackle problems or face challenges head on. She won't feel defeated because something is difficult.

I   Can you describe the classes that your child has attended at CTYI?

P8   Yes, I think they were very good and challenging.

I   What was his attitude towards attending this type of programme before he attended?

P8   I think he forgot what CTYI was like. He initially would have preferred to hang out with his friends at home. Once he arrived and started sharing his scientific interests he enjoyed it.

I   What would you like him to achieve by attending a program like this?

P8   With Sam we wanted him to realise where he stood in life. In his own school he was   a big fish in a small pond but tended to hide his ability by lowering his standards. I   felt coming here would show him the higher standards other people set for   themselves.

I   Can you tell me a bit about your child's experiences at school?

P8   He likes it but he gets bored.

I   Do you feel he gets academically challenged in school?

P8   No, I don't. Sam takes everything in his stride but still he gets awards every year for   his work without putting in too much of an effort.

I   What is his attitude towards attending school?

P8   Sam won't cause a row with anybody, he goes with the flow. Stephen had contempt   for the school, the teachers and the pupils. He felt that he was there to learn and if   they weren't teaching him properly then they should be fired.

I   What is Sam's favourite subject at school?

P8   He seems to be equally good in maths and English. He surprised me with how well he   did in the science subjects.

I   Is the chance to study something you wouldn't do in school an incentive for him to   come here? Or for you to send him here?

P8   We send him to have him realise that he can go. We wanted him to realise that he was   just as smart as Stephen was. Part of it was ego boost.

I   Is he better than his peers in school at most subjects?

P8   He would be, yeah. I worry he seems to be head and shoulders above his friends.   Another reason for sending him here was so he wouldn't judge himself by their   standards.

I   What about sports?

P8   Stephen and I both detest sports and the culture that surrounds sports. Stephen is   clumsy whereas Sam is very dexterous but is not interested in team sports.

I   Your child attends CTYI, can you tell me a bit about his ability?

P8   Sam will be interesting, him   dealing with school will be totally different to him dealing with university.

I   In general what is your understanding of the term gifted?

P8   I feel uncomfortable about it. I would never say to my family or friends that my two   sons are gifted. I am very proud of them but wouldn't boast about their ability.

I   Would you feel that they're academically gifted or would you put them below what   you consider academically gifted to be?

P8   Stephen always just came first in everything so he was obviously very gifted from an   early age. Sam nearly hides it to a degree, he proves it by effortlessly succeeding in   exams. Sam hides his academic gifts under his personality, he seems very well   balanced.

I   Your child attends CTYI, can you tell me a bit about his ability?

P8   Stephen is comfortable since going to university. Sam will be interesting, him   dealing with school will be totally different to him dealing with university.

I   Can you describe the classes that your child has attended at CTYI?

P9   She's in secure, safe environment where she feels she can be herself. She has the   freedom to express herself in anyway she wants.

I   What is her attitude towards attending the classes before she goes?

P9   This was her fourth session and after every year she says "I'm not going anymore"   because she enjoyed it so much she didn't think it could be improved upon. Last year   she was adamant she wasn't going back because a lot of her friends had finished but   she changes her decision and varies a little bit.

I   What would you like her to achieve by attending these courses?

P9   I don't have any high expectations in that respect. But initially when she went to do it   it improved her social skills. She didn't have great social skills due to the fact that she   felt she didn't fit in.

I   What about academically?

P9   If she likes a subject and wants to do well at it then she will do well at it.

I   Can you tell me a bit about your child's experiences at school?

P9   She loved transition year, and secondary school when she went in first. Transition   year and CTYI helped her a lot in that sense as it gave her a broader perspective.

I   What is her attitude towards attending school?

P9   She was fantastic in transition year. She gets bored in school but she is adamant that   she will not have a problem when she goes back in fifth year as she will have an   objective. She always puts pressure on herself.

I   Does she find herself challenged academically in school?

P9   I don't think so really. She did in the beginning in first year when it was all new and   very interesting. Ashling is very focused.

I   What's her favourite subjects?

P9   She loves history and English. She loves writing and poetry. She would write stuff   herself and had done since she was very young.

I   Is the opportunity for her to study something she can't do in school an incentive for   her to attend here or it mostly other factors.

P9   I think it's the whole package really. The subject matter would have to appeal to her   but it wouldn't just the subject matter. As the years have gone on it has more to do   with the whole experience of it.

I   In subjects that she's good at would you think that she is much better than her class   mates?

P9   I wouldn't say she's much better academically but in terms of aptitude tests she's   fantastic. She's very naturally intelligent, not just what you learn in books.

I   Is she good at sports?
P9   She would have been in the past but not so much recently. She would have played   gaelic and hockey. She did tae kwon do for years.

I   Is she naturally talented at that?

P9   She wouldn't have been naturally talented at it, particularly the tae kwon do. She   struggled at the higher levels because she was physically designed for it. She was   better at mixed martial arts after.

I   Do other people from her school attend?

P9   One of her friends went one of the years but that's it. She would have friends now that she has met through CTYI.

I   Your child attends CTYI, can you tell me a bit about her ability?

P9   I would have been very no nonsense about it. She wouldn't have been given   any preferential treatment. I knew she was clever from an early age though.

I   What's your own understanding of the term gifted?

P9   I would always have considered gifted to be a child prodigy. I don't consider her to be   gifted. I don't treat her any different and hope that she wouldn't expect to be treated   any different.

I   Would you consider her to be academically gifted then?

P9   She's naturally intelligent but she needs to apply herself in order to do well.

I   Can you describe the classes that your child has attended at CTYI?

P10   The most important thing after the first year is not the subjects on offer but who else is going to the programme. He felt this year he was maybe too old to attend as the people   he often looked up to were gone but it wasn't the case as he had a fantastic year.

I   What achievements would you like him to realise from attending this type of   programme?

P10   Motivation and confidence. Adolescents are looking for stimulation in all different ways. He always has always had a lot of friends but what he needs here is motivation.

I   Can you tell me a bit about your child's experiences at school?

P10   He loved school up until this year. This year was his transition year and has been   difficult. He overloaded himself timetable-wise and in terms of activities so his   attitude became more cynical.

I   What about his attitude towards attending school?
P10   Superb up until this year. He absolutely loved school. He loves a challenge but   ultimately most things aren't too challenging for him.

I   Is he academically challenged at school?

P10   He's very unforgiving of poor teaching. He gets angry with the teachers and in   particular his maths teacher.

I   What is his favourite subject in school?

P10   English, History and he loves French. He would have been good at maths up until   this year but he's keen to sort that out.

I   Is the opportunity to study something he can't do in school an incentive for   attending?

P10   Yes. It's the idea of focusing in on something and devouring it in one chunk. Here it's   intense and he can get into it quickly and immerse himself in it.

I   In subjects in school that he is good at would he be better than his peers or worse?

P10   In English he is probably top of the class and he reckons that he is number one in the   year. He'd be way ahead of people in French and

History. He did very well in his history project. His maths is not above average. It's about average at the moment.

I   What about sports?

P10   He played hockey, he goes out running. He goes to the gym. This year he was not   part of school activities partly because he took on things outside of it. Sport and   being fit is important to him.

I   How good is he at sports?

P10   He was a nifty hockey player when he kept that up. He's no good at rugby but still   put on the jersey and go out and play.

I   Your child attends CTYI, can you tell me a bit about his ability?

P10   I think he's very lucky in the sense that he's pretty bright and has social graces. He's   pretty balanced and has a good insight into things. He likes people and people like   him so I think he's ok.

I   What's your general understanding of the term gifted?

P10   I think it's a very loaded term and I don't like it.

I   What's your perception of what gifted is? Does a term exist?

P10   I think talented youth is not a bad formula. There are things that make me shy away   from the term gifted because you can be gifted in different ways. I think that there is   a burden put on these kids because it's like you're so gifted the world had to make   special accommodation for you.

I	Can you describe the classes that your child has attended at CTYI?

P11	The standard and pace of the class is far higher. The subjects themselves are more interesting. The standard of his peers was so high it definitely challenged him.

I	What would his attitude be towards attending classes before he attends them?

P11	Each year it was his decision to do it. He wanted to do the tests and after the first year he wanted to do the test again to get a scholarship which he got. He always looked forward to it especially after doing the CTYI for primary schools.

I	What achievement would you hope he'd realise from attending these classes?

P11	I hoped he'd realise that study was something that could be enjoyed, not just endured.
	Wanting to study rather than just to pass exams. The various courses he did would also give him a flavour of college academia.

I	Can you tell me a bit about your child's experiences at school?

P11	He liked school this year as he moved to a grind school. It's like CTYI as in its challenging and the kids are highly motivated in general. The teachers are young and interesting. He didn't find his original school challenging or interesting.

I	What is his attitude towards attending school in general?

P11	Fourth year was a disaster as it wasn't challenging. The transition year was terrible as he had nothing to do. He wished he'd skipped straight to fifth year. He just got so lazy. He found first to third year very easy.

I	What's his best or favourite subject in school?

P11	He's good at them all. He loves Irish and is very good at it. English too. Maths he felt he wasn't too good but he's doing alright. He finds geography very easy. I think he likes all his subjects.

I	Relative to his peers would he have been much better than them in all his subjects?

P11	Yes. He would have been the best in the class at everything.

I	Did anyone else from that school attend?

P11   No, a boy from third year attended when he was in first year.

I   Your child attends CTYI, can you tell me a bit about his ability?

P11   I suppose that first time he was assessed and his scores were so high it shocked me a little. For the junior cert I realised that my way of studying wasn't the only effective way for him. He could literally just glance at it and know it instantly.

I   What's you're understanding of the term gifted in general?

P11   It's kind of an embarrassing term in a way. All children are gifted in so many ways so its not a term I'm terribly comfortable with. CTYI is a nicer term. I suppose it means highly capable academically.

I   Would you consider him gifted even though it's a term you're not comfortable with?

P11   I knew from when he was two that he was highly gifted. I felt the concept made me nervous because it comes with problems. I knew he was going to be bored in school.

I   Can you describe the classes that your child has attended at CTYI?

P12   She never said she found it difficult but the level of challenge is above
what she'd   normally be used to.

I   What is her attitude towards attending the first time?

P12   I think she was a bit apprehensive the first time but from day one she
was delighted   and looked forward to the second one even more.

I   What would you like her to achieve by attending?

P12   I think the courses she did are the ones that would appeal to her after
she leaves

            school.

I   And what about socially?

P12   She was always very sociable. She had loads of friends that she made
here and keeps   in contact with them.

I   Can you tell me a bit about your child's experiences at school?

P12   She loves school.

I   How challenged academically is she in school?

P12   She didn't push herself to hard while still doing well. She was very
comfortable.

I   What's her attitude towards school in general?

P12   Very good. She likes to do well and to please.

I   What's her favourite subjects?

P12   She loves sciences. And languages. She did French and Spanish for the
Junior Cert   and loved it.

I   In subjects she's good at where would she be in relation to her peers in
school? At the   top of the class?

P12   She'd be at the top in most subjects. She thinks she's not great at maths
herself.
I   Are there others from the school attending here?

P12   No

I   Is the opportunity to study something you wouldn't normally get in school one of the   main incentives or is it more social?

P12   I felt that it would push her a little bit more outside her comfort zone and open her   mind to be with kids who are highly motivated as apposed to her own friends.

I   Your child attends CTYI, can you tell me a bit about her ability?

P12   Well, I would have expected that she would get on the course here. I'm glad she did as I feel it has opened her eyes as to what she can do. I find she is well balanced and I don't have to tell her to get out of her books and socialise.

I   What's your understanding of the term gifted in general? Are you comfortable with   it?

P12   I do hear the term a lot and I feel sorry for the ones who don't have the social skills to   go along with the academic skills. It has kind of a negative stereotype attached to it.

I   Would you consider Aisling to be academically gifted?

P12   No, I don't really. I think she's bright but I wouldn't ever say to someone that she was   gifted. I'd say that she was bright and could do whatever she wants.

I   So how comfortable are you with that term?

P12   I'm not. It's not really a term that I would use.

Appendix D: Research Ethics Forms

Parent Plain Language Statement

This study is part of a thesis to be completed by the Irish Centre for Talented Youth (CTYI) Director, Mr Colm O'Reilly as part of a taught doctorate programme under the tutelage of Dr Gerry McNamara from the School of Education at Dublin City University. All participants in the study will be parents and students attending courses at CTYI. The study will focus on high ability students and what perceived effects that attending Saturday and summer courses run by CTYI have on their academic and social development. The study will look at reasons for students attending the CTYI classes and any achievements they may have realised as a result of attendance from the perspectives of the students and their parents. The study will also compare levels of academic satisfaction with CTYI classes compared to school and also in comparing differing attitudes that students may have in attending CTYI compared to school. The research will involve completion of a questionnaire and a possible taped interview following the return of the questionnaire. Participation in this study will lead to greater understanding of the needs of high ability children and will allow CTYI to make better provisions for these children.

While parents will be evaluating CTYI in one aspect and the research is being conducted by the Director of CTYI a potential bias may occur. This research is designed to analyse the current provisions available to high ability children and currently CTYI is the largest available outlet in this country. The researcher would hope that all participants are honest in their responses and the results hope to portray an accurate assessment of the provisions for gifted children in this country. The supervisor for this thesis Dr Gerry McNamara is a leading expert in programme evaluation and is the cofounder and board member of the Irish Evaluation Network. Please be assured that your participation/non participation in this research will in no way affect your relationship with CTYI or DCU.

All information provided to the researcher will be treated in confidence and no names will be used in the published research. The information gathered will be stored in the offices of CTYI at Dublin City University and only the researcher will have access to this information. Any participants may withdraw from the study at any stage and there will be no penalty for withdrawing from the project before all stages have been completed.

If participants have concerns about this study and wish to contact an independent person,
please contact:

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

Parent Informed Consent Form

Dear parent

You currently have a child attending programmes with The Irish Centre for Talented Youth (CTYI) on Saturday mornings or summer programmes. CTYI invite you to participate in a research study being carried out to identify the perceived effects of CTYI programmes on participants and their parents. This research is being carried out by Colm O'Reilly, the Director of CTYI as part of a taught doctorate programme under the supervision of Dr Gerry McNamara of the School of Education at Dublin City University.

The research study will involve completion of a questionnaire and then a small sample of students will be selected to participate in further audio taped interviews. The questionnaire should take about 10 minutes to complete and the follow up interview if you are called upon should take a further 15 minutes. Please take time to read and answer the questions below. If you have any concerns or questions in relation to the research please contact Colm O'Reilly at (01)-7005634 or 086-8610733.

Participant – 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*

All information provided to the researcher will be treated in confidence and no names will be used in the published research. The information gathered will be stored in the offices of CTYI at Dublin City University and only the researcher will have access to this information. Any participants may withdraw from the study at any stage and there will be no penalty for withdrawing from the project before all stages have been completed.

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

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____

Student Plain Language Statement

This study is part of a project to be completed by the Irish Centre for Talented Youth (CTYI) Director, Mr Colm O'Reilly as part of a taught doctorate programme under the supervision of Dr Gerry McNamara from the School of Education at Dublin City University. All participants in the study will be parents and students attending courses at CTYI. The study will focus on high ability students like yourself and what perceived effects that attending Saturday and summer courses run by CTYI have on your academic and social development. The study will look at what reasons you may have for attending the CTYI classes and what achievements you may have realised as a result of attendance. The study will also compare your level of academic satisfaction with CTYI classes compared to school and also in comparing differing attitudes that you may have in attending CTYI compared to school. The research will involve completion of a questionnaire and a possible taped interview following the return of the questionnaire. Participation in this study will lead to greater understanding of the needs of high ability children and will allow CTYI to make better provisions for high ability children.

All information provided to the researcher will be treated in confidence and no names will be used in the published research. The information gathered will be stored in the offices of CTYI at Dublin City University and only the researcher will have access to this information. Any participants may withdraw from the study at any stage and there will be no penalty for withdrawing from the project before all stages have been completed.

If participants have concerns about this study and wish to contact an independent person, please contact:

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

You are currently attending programmes with The Irish Centre for Talented Youth (CTYI). CTYI would like to invite you to participate in a research study being carried out to identify the perceived effects of CTYI programmes on participants and their parents. This research is being carried out by Colm O'Reilly, the Director of CTYI as part of a taught doctorate programme under the supervision of Dr Gerry McNamara of the School of Education at Dublin City University.

The research study will involve completion of a questionnaire and then a small sample of students will be selected to participate in further audio taped interviews. The questionnaire should take about 10 minutes to complete and the follow up interview if you are called upon should take a further 15 minutes. Please take time to read and answer the questions below. If you have any concerns or questions in relation to the research please contact Colm O'Reilly at (01)-7005634 or 086-8610733.

Participant – please complete the following (Circle Yes or No for each question)
Have you read or had read to you the Plain Language Statement for Students? 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

All information provided to the researcher will be treated in confidence and no names will be used in the published research. The information gathered will be stored in the offices of CTYI at Dublin City University and only the researcher will have access to this information. Any participants may withdraw from the study at any stage and there will be no penalty for withdrawing from the project before all stages have been completed.

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

Participants Signature: _____

Name in Block Capitals: _____

Witness: _____

Date: _____