An Empirical Investigation of the Early University Entrance Programme in CTYI

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Declaration of Work

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

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List of Abbreviations

AP	Advanced Placement
CTY	Centre for Talented Youth
CTYI	Centre for Talented Youth Ireland
COVID-19	Coronavirus
DASS-A	DASS - Anxiety Subscale
DASS-D	DASS - Depression Subscale
DASS-S	DASS - Stress Subscale
DEIS	Delivering Equality of Opportunity in Schools
DES	Department of Education and Skills
DASS-21	Depression, Anxiety and Stress Scale - 21
DMGT	Differentiated Model of Gifted and Talented
DCU	Dublin City University
ECCE	Early Childhood Care and Education
EEP	Early Entrance Program
EUE	Early University Entrance
ETB	Education and Training Boards
FLS	Free Learning Semester
GSE	General Self-Efficacy Scale
MMCS	Mixed Methods Case Study
NAGC	National Association for Gifted Children
RTA	Reflexive Thematic Analysis
RSES	Rosenberg Self-Esteem Scale
SWLS	Satisfaction with Life Scale
STEM	Science, Technology, Engineering, and Mathematics
SERC	Special Education Review Committee
EPGY	Stanford's Educational Program for Gifted Youth
SACQ	Student Adjustment to College Questionnaire
TAMS	Texas Academy of Mathematics and Science
DELES	The Distance Education Learning Environments Survey

EPSEN	The Education for Persons with Special Educational Needs
NCCA	The National Council for Curriculum and Assessment
OECD	The Organization for Economic Co-Operation and Development
SCGY	The Special Class for the Gifted Young
SET	The Study of Exceptional Talents
SMPY	The Study of Mathematically Precocious Youth
TA	Thematic Analysis
TY	Transition Year
USTC	University of Science and Technology
UW	University of Washington
UWAcad	University Washington Academy
VPTP	Vocational Preparation and Training Programme

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An Empirical Investigation of the Early University Entrance Programme in CTYI Thesis Abstract

Cathy Woods

This study focuses on the student's experiences in the Centre for Talented Youth, Ireland (CTYI) Early University Entrance (EUE) programme and whether this impacts their transition to first-year university. EUE is a dual enrolment programme that allows high-ability Transition Year students to attend CTYI's home university, Dublin City University, one day a week while still attending school. These students complete two university modules over one or two semesters. This dissertation examines the experience of current participants and former students (senior cycle at secondary school and first year university students). The study implemented a mixed-methods, case study approach to help gain a broader view of the EUE programme. Quantitative measures included the Depression, Anxiety and Stress Scale - 21 Items (DASS-21), Rosenberg Self-Esteem Scale (RSES), General Self-Efficacy Scale (GSE), Satisfaction with Life Scale (SWLS), Student Adjustment to College Questionnaire (SACQ), and The Distance Education Learning Environments Survey (DELES). Qualitative methods included interviews and a questionnaire.

Through a reflexive thematic analysis, five key themes were identified: Love of Learning explored the passion for learning throughout their participation in the programme; Adapting to Online Learning explored their perceptions of online learning academically and socially; Personal Growth examined individual growth and self-fulfilment from participation; and School: Steppingstone to True Interests, explored their perceptions of secondary school with a majority reporting feelings of boredom and not being adequately challenged. The final theme, Making the Most of It: Students Transition to University, examined how the *university* cohort perceived their experience entering first year of university.

The quantitative data concluded that past students reported higher levels of depression than current participants. This may be due to transitioning from an optimum academic environment on the DCU campus to distance learning in their senior cycle of school (COVID-era). Current students in the EUE programme reported higher levels of instructor support than first-year university students. This is perhaps due to smaller class sizes for the EUE students and engaging in a preferred learning environment in a subject that interests them compared to secondary school. No other statistical significance was found across the three cohorts in the other quantitative scales. The study presents a snapshot of these high-ability students at secondary school and first-year university students during a global pandemic and how this impacted them academically, emotionally, and socially. Overall, no single cohort was affected more than another, and the current EUE students engaged in a university experience that was true of its time.

Chapter 1: Introduction

This research sets out to investigate the Early University Entrance (EUE) programme based at Dublin City University (DCU). Dr Catriona Ledwith initiated the programme at the Centre of Talented Youth Ireland (CTYI), and it has been running successfully for over ten years (Ledwith, 2013). EUE is a dual enrolment programme where 15-year-old students with high academic ability and motivation undertaking the Transition Year (TY) programme participate one day a week in selected first-year university modules in DCU while attending their mainstream school.

TY is a unique feature of Irish education. TY is a year that aids personal, social, and vocational development without any school or state examinations (Clerkin, 2018). The EUE programme is offered to TY students as it ties in with their personal development, and as they have more flexibility to attend, allowing high-ability and gifted students to engage in challenging third-level coursework. EUE is a programme in Ireland facilitating accelerated learning for highly talented and gifted students. Over the years, there has been exponential growth in the number participating in EUE, and the researcher was interested to explore how current and past students felt about the experience.

1.1 Gifted Education in Ireland

To understand the origin of this programme, it is essential to get a sense of the policy and programme landscape regarding education for gifted children in Ireland. Gifted education is comparatively new in Ireland and arguably emerged due to changing attitudes to what was then identified as 'special needs' education in the 1990s. The government established the Special Education Review Committee in 1993 (SERC, 1993) to solicit advice and expertise from groups representing those with 'special needs' and to advocate for best practices. The approaches taken in the US regarding gifted policy 20 years prior, (the Marland Report (1972) was a notable landmark and the first national report on gifted education) have impacted how gifted education is defined in Ireland. According to O'Reilly (2018), it forms the cornerstone of the Irish definition of giftedness.

Most OECD countries have incorporated giftedness into their educational policies (OECD, 2019); however, countries take divergent approaches to the question of how to address the unique requirements of gifted students. Some countries, such as South Korea, believe gifted education should be implemented as an independent and distinct policy from mainstream education (Lee et al., 2016). Other countries, like Ireland, integrate gifted education into mainstream policies such as 'special education'.

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" (Department of Education and Science, 1998).

While the Education Act in Ireland in 1998 recognised the requirement that everyone should have the appropriate education to meet their specific needs, the terminology needed to be modernised/more concise, and clarification on what defined "special needs" was necessary. In 2004, The Education for Persons with Special Educational Needs Act (EPSEN Act) was published, discussing special needs such as dyslexia and other learning difficulties, and to include these students in a mainstream environment as much as possible. Unfortunately, gifted education was not featured in the Act. This meant there was no legal foundation for them to have special needs resources to help them in mainstream education (O'Reilly, 2018).

The National Council for Curriculum and Assessment (NCCA) became a recognised judicial body in 2001, following the Education Act (1998). The NCCA guide the Minister for Education and Skills on the national curriculum and assessment for primary and secondary schools in Ireland. Its vision is to help lead and facilitate innovation in education for students, teachers, and other stakeholders. In 2007, the NCCA examined the needs of gifted students and released draft guidelines for teachers to help them engage with these students. The guidelines did not use the term gifted but instead "exceptionally able" (NCCA, 2007).

It defines *exceptionally able* as:

> "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". (NCCA, 2007, p.8)

An important critique is that these guidelines provide several general checklists for identifying exceptionally able students across the curriculum and subject-specific checklists. The literature on teacher evaluation scales provides contradictory assessments of their efficacy. Robinson et al. (2007) think teachers can effectively identify giftedness. Other researchers, such as Ford et al. (2008), are wary of the effectiveness of teacher checklists. Westberg (2017) contends that many teacher rating scales for screening and identifying exceptional students need more empirical support. Although it is a step in the right direction, it could allow a student to be considered gifted in one school and not another due to various factors such as the experience of the teacher and any biases they may have (Golle et al., 2023).

In 2008, the NCCA completed an evaluation of the 'exceptionally able' guidelines with teachers and school principals. Their findings suggested that the guidelines did help teachers and schools in evaluating and critiquing their policies for gifted children (NCCA, 2008). However, they lacked enough guidance to allow teachers to determine appropriate curricular interventions for these gifted students. In a more recent study, Cross, Cross and O'Reilly (2014; 2018) examined attitudes about gifted education, drawing on the opinions of 837 Irish educators, including teachers, school leaders and other staff. 64% of participants reported that their school had procedures for identifying gifted students, which is a positive development (Cross et al., 2014; 2018). Participants were favourably disposed to the provision of appropriate services for gifted students. However, they also expressed reservations regarding grade acceleration as an option for gifted students despite research advocating the benefits of this service (Assouline et al., 2015; Rogers, 2015; Steenbergen-Hu et al., 2016; Warne, 2017). Almost half of the 837 teachers (47%) reported they did not believe they had the allocation of specialists to help them provide these services for gifted students, which is a challenge for educators. Participants

highlighted that they face issues with providing services for gifted students, such as a lack of time, training, and resources to aid them. Another prominent issue teachers identified was the difficulty differentiating academic material appropriately for high-ability students. Overall, educators in Ireland expressed an interest in cultivating gifted education. However, there is a disconnect in communication between school officials and teachers in conjunction with a lack of appropriate services and development (Cross et al., 2014).

1.2 Centre Talented Youth of Ireland (CTYI)

While identifying giftedness in children and young people in the US had many roots, one of the initial leaders in the field was Johns Hopkins University which established the Centre for Talented Youth (CTY) in 1979 (Barnett et al., 2005). A key figure in the establishment of the Centre was Professor Julian Stanley. In the 1970s, he sought to support a mathematically gifted 13-year-old student by allowing him to continue his studies at the University (Brody & Stanley, 2005). The CTY has since expanded its programmes to include talent searches, academic programmes, online courses, and summer programmes to support gifted and talented students (Tourón et al., 2005). In 1992, Dublin City University (DCU) and John Hopkins University collaborated to develop the Centre of Talented Youth Ireland (CTYI). It was the first program of its kind in Ireland and is the only formal provider of special education to students with high academic ability in this country (O'Reilly, 2018).

CTYI provides assessments and programmes to ensure that the academic and social needs of gifted primary and secondary school children are met. Over the last 30 years, CTYI has grown and adapted to the needs of Irish students. In Ireland, gifted programmes are provided externally by CTYI, and anything available in schools tends to be ad hoc.

In its mission statement, O'Reilly (2018, p. 91) states that the Centre is committed to:

- "To identify pre-
  college children who reason exceptionally well mathematically and/or verbally;
- To
  provide gifted youth from Ireland and abroad with stimulating coursework and related educational opportunities through an annual summer programme and Sat urday classes;
- To provide teacher training and support services to schools participating in the C TYI programme;
- To assist parents in advancing talented students by providing access to informati on and resources; and
- To conduct research and evaluation on talent development and the efficacy of programme models and curriculum provision."

Here, we see the critical issues of identification, support, teacher education and research that have underpinned many of the initiatives that have come out of CTYI since its establishment. The EUE programme grew out of a need to support gifted students during their Transition Year, a year that often needs more academic rigour. It was developed from best international practice and began as a pilot study that formed a PhD thesis by Ledwith (2013).

1.3 Acceleration & The Early University Entrance Programme

Acceleration refers to modifying the educational programme of gifted students by allowing them to progress faster or access advanced curriculum beyond their grade level (Steenbergen-Hu et al., 2016). The rationale for acceleration lies in the belief that gifted learners benefit from educational experiences that match their cognitive abilities and provide appropriate challenges, allowing them to reach their full potential (Assouline et al., 2015), known as *optimal match* (Lupkowski-Shoplik et al., 2003; Robinson & Robinson, 1982; VanTassel-Baska, 2005; Van Tassel-Baska & Stambaugh, 2008). One such form of acceleration is dual enrolment. Dual enrolment refers to a programme that allows students to enrol in college or university courses while still in high school (Johnson, 2022). This educational model allows students to engage in advanced

coursework, experience college-level academics, and earn college credits before graduating high school (Dare & Nowicki, 2015).

Though not strictly speaking early university entrance, the Early University Entrance programme at CTYI is more akin to a dual enrolment. High-ability Transition Year (TY) go through a rigorous selection process to achieve a place and can study courses in a broad range of topics including biology, business, engineering, physics, psychology. Students participate in two modules from the selected programme's degree course and can participate in one or two semesters. The first major study was by Ledwith (2013) and focussed on the programme's development and pilot run, with just 20 participants. Ledwith (2013) followed the academic, emotional, and social development of the students throughout the programme. Students assimilated successfully and made new university companions they could identify and rely on for support. The students performed just as well and some even better than their first-year counterparts. They discussed how they felt better equipped going back to 5th year in their traditional school and had a better idea of their academic goals and direction (Ledwith, 2013).

Since the pilot, course adaptations have been made so that the students now only attend one day each week and are in class with other TY students, unlike the pilot study, where they were in with the regular first-year cohort. This has transformed EUE by allowing more students to enrol, making the course simpler to work into the school week, and allowing students from a wider geographical area to attend.

1.4 Thesis Synopsis

Over 500 students attended EUE during the 2021-2022 academic year, demonstrating the viability and expansion of the programme. Ultimately EUE provides students with a view of the rigorous coursework they will encounter in third-level education, which may inspire them to pursue their goals for the future. Once per week, EUE students can leave their traditional classroom to engage in self-directed learning, common in third-level education.

This research began in September 2020 and thus coincided with the worldwide pandemic and consequent lockdowns that started in 2020. In summary, the current study

provides a snapshot of time of how *current*, *past* and *university* students engaged with the EUE during the COVID period. It was of interest to conduct research not only with current students but also with past students who were in their senior cycle of secondary school and first year of university to see if the programme influenced their adjustment to third-level education. Using a pragmatic, mixed methodology with a case study design, this study explored how the participants perceived their time on the EUE programme academically, emotionally, and socially.

The author centred the research around three central research questions:

1. What is the perceived student experience of the EUE programme?

2. Does the EUE programme impact student's adjustment to university?

3. What impact did COVID-19 have on Irish gifted students?

Many countries, including Ireland, adopted social distancing, stay-at-home orders, and school closures (Murphy, 2020). During this period, there was disruption to the daily activities of gifted students. As a result, they reported feelings of isolation, frustration, and loss of motivation (Aboud, 2021). CTYI served over 4,000 students online in various courses (CTYI, 2020). It was the first time these programmes, including EUE, shifted to a completely online platform. In these unprecedented times, students were required to acclimatise to online learning. This transition directly impacted the students who were part of this study and the findings.

In Chapter 2, Literature Review, the field of giftedness is discussed and how it led to contemporary perspectives. The chapter then provides a background to the Irish education system and the unique optional year offered to students called Transition Year. The chapter follows into the area of acceleration and examines early university entrance, and gifted students' transition into university, which are essential aspects of this research. Finally, it examines distance learning for Irish secondary school students in general and within gifted education.

Chapter 3, Methodology and Research Design, addresses the authors' perspective on the nature of knowledge and outlines the research questions that serve as the

foundation for this thesis's objectives. Following this, it examines the case study methodology and presents a theoretical framework for this single evaluative case study that uses a holistic approach. It offers a parallel mixed-methods research design, a hybrid model of mixed-method research and a case study (Walton et al., 2020). It outlines using thematic analysis to analyse the qualitative data (Braun & Clarke, 2021). Finally, it describes how the quantitative and qualitative data were analysed.

Chapter 4, Findings, presents the quantitative and qualitative findings as a case study. The quantitative data concluded that past students reported higher levels of depression than current participants. Current students in the EUE programme reported higher levels of instructor support than first-year university students. No other statistical significance was found across the three cohorts in the different quantitative scales. Through a reflexive thematic analysis, four key themes were identified: Love of Learning explored the passion for learning throughout their participation in the programme; Adapting to Online Learning explored their perceptions of online learning academically and socially; Personal Growth examined individual growth and self-fulfilment from participation; and Experience of School, explored their perceptions of secondary school with a majority reporting feelings of boredom and not being adequately challenged. The chapter concludes with a summary of the overall results.

Chapter 5, Discussion, brings together and attempts to make sense of the findings from the preceding chapter. There are several likely explanations for the results. It will discuss the academic, emotional, and social experiences of the *current*, *past*, and *university* Early University Entrance cohorts. It will examine the influence online learning had on study participants and the significance COVID-19 had for gifted students.

Finally, Chapter 6, Conclusion, reviews the research questions posed in the research methodology and evaluates the study's effectiveness in seeking answers. The study presents a snapshot of these high-ability students at secondary school and first-year university students during a global pandemic and how this impacted them academically, emotionally, and socially. Overall, no single cohort was affected more than another, and the current EUE students engaged in a university experience that was true of its time.

Chapter 2: Literature Review

2.1 Introduction

Before reviewing the research conducted, it is important to examine the background of gifted education, which serves as the focus of this study. If one even accepts the term "giftedness" as being appropriate, then attempting to define it leads to a very convoluted discussion on the nature of intelligence in general, which is further complicated by the question of what intelligence itself means. The chapter starts by tracing the development of intelligence theory from the 18th century to the present. It tries to understand how shifts in the notion of intelligence throughout this time impacted the parameters of gifted theory.

The chapter then gives a more detailed background to the Irish education system and the unique optional year offered to students called Transition Year. The chapter follows into the area of acceleration, and it examines early university entrance, and gifted students' transition into university, which are essential aspects of this research. Finally, as the current study was undertaken during the Covid pandemic, it was necessary to examine distance learning for Irish secondary school students and within gifted education.

2.2 Early Theories of Giftedness

Defining giftedness is a complex task due to the need for a universally accepted definition and its perplexing conglomeration (Coleman & Cross, 2005). The US National Association for Gifted Children (NAGC) provide a broad definition:

> "Children are gifted when their ability is significantly above the norm for their age. Giftedness may manifest in one or more domains such as; intellectual, creative, artistic, leadership, or a specific academic field such as language arts, mathematics or science" (NAGC, 2019).

We will begin our exploration of giftedness by examining Lewis Terman's contributions to the field of giftedness and his intelligence research. Terman considered giftedness was only related to a high IQ (Boake, 2002). Using IQ to identify his subjects would have been the only option during this era. He established a classification system used in schools to identify gifted students. Students with an IQ score above 135 are

regarded as moderately gifted, above 150 as exceptionally gifted, and above 180 as profoundly gifted (Webb et al., 1982). Lewis Terman modified Binet's scale and developed the Stanford-Binet Intelligence Scale, renowned for being one of the first intelligence scales to identify gifted children. (Terman, 1916).

Terman conducted numerous longitudinal studies of gifted children (Terman, 1926; Cox, 1926; Burks et al., 1930; Terman & Oden, 1947; Terman & Oden, 1959; Holahan et al., 1995). He determined in comparison, they were psychologically better adjusted, healthier, and obtained more academic success (Bracken, 2012). The critical findings helped to dispel commonly held views that individuals deemed gifted were socially awkward and ill-adjusted (Bracken, 2012; Lubinski, 2016). Critics of Terman's research highlighted the racial disparity of participants in his studies, as California's 1920's demographics were mainly Caucasian (Warne, 2019). Debate continues to this day regarding the overemphasis on IQ in the determination of giftedness (Ziegler et al., 2012). One notable critique highlights that IQ tests fail to consider non-cognitive factors such as socio-emotional skills and interpersonal abilities (Ganuthula & Sinha, 2019).

More recent theories of giftedness have moved away from the idea of a single entity, associating IQ with giftedness. Feldman (1979) and later VanTassel-Baska (2005) stated that giftedness might be specific to one domain, such as verbal, mathematical, etc. This did not consolidate with the previous theory of general intelligence, 'g'. Scholars who determine giftedness is about domain-specific abilities highlight the need for those well advanced in specific areas to attain acceleration or enrichment to help them achieve success and the skills needed. The core idea is to obtain knowledge and increase cognitive abilities in a distinct domain. Researchers in this area often fail to incorporate or deem essential psychological variables (VanTassel-Baska, 2005). Domain-specific researchers claim that psychological variables such as creativity result from giftedness and are not something that may make an individual gifted. They consider these psychological variables to emerge after considerable work has been mastered (VanTassel-Baska, 2005). Researchers within this model consider giftedness a complex framework dependent on numerous psychological processes working together. These psychological processes at play impact a broad range of creative behaviour. However, it is essential to note that this thought does not eliminate the significance of domain-specific abilities.

2.3 Modern Theories of Giftedness

Developmental models were established in response to the general concern about the overemphasis on genetics' role in giftedness instead of focusing on the changeable "gifts" and broadening the scope compared to the previously discussed systems models. Developmental theories include external factors that may interact with the internal aspects of the individual to foster gifted behaviour (Sternberg & Kaufman, 2018). Mönks (1992) modified Renzulli's three-ring model (Renzulli, 1986). They developed the Multifactor model of giftedness, which encompasses the impact the environment has, such as the school, family, and peers, on the three psychological variables proposed by Renzulli (motivation, creativity, and exceptional abilities). Another paramount researcher in this field is Françoys Gagné (2004), who devised the Differentiated Model of Gifted and Talented (DMGT). Gagné highlighted how "gifted" and "talented" were constantly used interchangeably and proposed his model to emphasise the distinction in these terms. DMGT's objective is to ascertain the vital environmental factors (home, school, parents, activities, etc.), non-cognitive variables (motivation, temperament), and learning, pedagogy, and training that modify inherited "gifts" into specific talents. Gagne (2004) highlights the importance of chance, especially regarding lotteries of birth, heredity and home environment which all play a pivotal role in individuals' life trajectories.

Feldhusen (1998) developed a model of talent development that strives to incorporate domain-specific abilities with the view that general abilities are somewhat genetically predetermined while also recognising the importance of experience and sociocultural context has on developing specific abilities (Csikszentmihalyi, 2013). Like other developmental model researchers, Feldhusen tried to clarify the evolution from innate abilities to presenting specific talents. Feldhusen (1998, p.204) states, "Our model is a vertical sequence growing like a plant or flower". The talent development model has gained momentum in the field of gifted education as a model to cultivate the strengths and talents of gifted students and students with high potential (e.g., individuals who may not be formally identified as intellectually gifted per se but who show their capacity and high-performance in multiple domains) (National Association for Gifted Children, 2015). This model emphasises the importance of providing challenging and enriching learning experiences that align with students' abilities and interests (Subotnik et al., 2011). It recognises that gifted students possess diverse talents across multiple domains and encourages the development of these talents through differentiated instruction,

enrichment activities, specialised programs, collaboration, and real-world application (Mofield & Mofield, 2022). The talent development model also addresses socioemotional factors, promoting positive self-concept, social-emotional support, and balancing achievement and well-being (Mofield & Mofield, 2022).

In summary, the gifted education discipline has followed an intriguing development trajectory from the initially limited definition of giftedness as "high IQ" (Terman, 1925) to the current multifaceted and complex viewpoints and ideas of giftedness. Contemporary theories propose that giftedness incorporates cognitive and non-cognitive factors and specialises in the social context in which gifts become talents (Gagné, 2021). The current viewpoint on giftedness is dynamic and evolving, incorporating multiple perspectives, theories, and metrics. With each new theory, our understanding of giftedness and gifted students grows and deepens (Plucker et al., 2017). Modern theories of giftedness and talent development, therefore, include non-cognitive factors such as motivation (Worrell, 2018), autonomy (Gagné, 2021), and self-efficacy (Siegle et al., 2017; VanTassel-Baska, 2021) as explanations for individual differences among gifted students and differences between gifted and non-gifted students.

We will now look at the well-being and adjustment of gifted students, which are of interest to the current study.

2.4 Adjustment of Gifted Students

The well-being of gifted students is critical to their overall development and success (Papadopoulos, 2020). Socio-emotional development equips individuals with the competencies to encounter, adapt, and effectively manage personal and social challenges (Papadopoulos, 2021). There is a dichotomy between the social and psychological resilience and emotional fragility of gifted children and their peers of the same age and between gifted children and their peers with similar intellectual development (Neihart et al., 2015).

There has been a longstanding focus on the adjustment of gifted individuals. In general, two perspectives have prevailed. According to the first theory, gifted children are better adjusted than their classmates with typical development because they have increased self- and social awareness. Consequently, they are more resilient to stress and conflict. This view is supported by numerous empirical investigations (Neihart et al., 2015). Second, gifted children are more susceptible to psychological problems, especially during

adolescence and maturity, because they are more sensitive and experience higher levels of isolation and stress (Silverman, 2018). Some evidence supports this notion (Gross, 2006). Gifted children experience unique psychological issues, but their giftedness does not cause them. Giftedness adds complexity to an individual, which, depending on several factors, can either facilitate or hinder healthy adjustment (Neihart & Yeo, 2018).

It has long been proposed that a disparity between children's developmental requirements and their environment poses an issue to their well-being and success. All children require frequent opportunities to cultivate a sense of mastery or competence over themselves and their environments and establish strong social relationships to thrive. A poor fit with the educational setting, e.g.the absence of challenge in the curriculum, may lead to various adjustment issues (Neihart et al., 2015). A possible problem that may emerge when a task is too simple is that children may not have the opportunity to understand the connection between effort and outcome (Blackwell et al., 2007).

One of the most accurate determinants of well-being is the presence of strong, positive social relationships. (Wickramaratne et al., 2022). Although gifted children do not typically struggle to make friends, there is evidence that some of them do (J. Cross, 2016). Many gifted children learn and play in environments with limited access to peers with similar abilities and interests. CTYI programmes allow these students to interact with intellectual peers who share their passion for learning and similar interests.

CTYI published a report in 2022 (Cross, Cross & O'Reilly, 2022) that encapsulated ten years of research examining more than 2,600 gifted students who have attended CTYI programmes. The ten studies in the report examined Irish gifted students' academic, social, and emotional experiences. Most CTYI secondary students (66%) had resilient dispositions; they were sociable, agreeable, conscientious, emotionally resilient, and welcoming to new experiences. Nearly all students displayed high confidence levels in their academic ability, and most had confidence in educational and social domains (Cross et al., 2022). Some students reported concealing their abilities to maintain favourable peer relationships. Their abilities were frequently apparent to their classmates, and being recognised as a gifted student was, on average, a positive experience. However, the constant pressure to achieve is significant and hurts their self-concept. Some CTYI students experienced painful peer rejection, but most did not perceive themselves as excluded. They preferred working independently and viewed themselves as more

committed to learning than their classmates (Cross et al., 2022). Overall, it appears that CTYI students are well-adjusted both academically and socially.

The next section will examine the landscape of the Irish education system and take an in-depth look at a unique aspect called Transition Year (TY). This is an optional year that students can participate in before entering their senior cycle and the year they can participate in the Early University Entrance programme.

2.5 Irish Education System

Ireland's education system has been depicted as relatively stagnant compared to international institutions (Looney, 2006). Unfortunately, Ireland has a poor record for students with special needs and no mention of gifted students in educational legislation (O'Reilly, 2018). There are 3,240 primary schools in Ireland, 728 secondary schools, nine universities, 5 Technical Universities (TU), 2 Institutes of Technology (IoT)s, 16 Education and Training Boards (ETBs) and various other educational institutions supported by the state (Department of Education, 2022). Most primary and secondary schools in Ireland are privately owned and directed by religious orders or patron bodies but are funded by the government.

The Department of Education, under the authority of the Minister for Education, manages the school system fiscally and through policy. Education is compulsory for students aged 6-16 years old. However, most children begin primary school at five years old. In January 2010, the government introduced the Early Childhood Care and Education (ECCE) Scheme, which helps fund childcare and education for children two years and eight months old until they enter primary school. The government contributes a portion of the cost directly to the participating daycares. This helps fund a set amount of hours and weeks for a child to attend with no cost to the caregiver (Department of Children, Equality, Disability, Integration and Youth, 2019). Primary education entails an 8-year cycle of junior infants, senior infants, and first to sixth classes. Primary education is free for all children in Ireland (Department of Education, 2019). Children aged 12-18 years attend secondary education and must complete two state examinations; the Junior Certificate (completed after the first three years of the Junior Cycle syllabus), and the Leaving Certificate (following two years at the senior cycle).

2.5.1 Transition Year

Students have an optional year they can participate in before entering the senior cycle; this optional year is called the Transition Year programme (TY). TY is a year that students can partake in to help aid their personal, social, and vocational development without any examinations during this period (Clerkin, 2018). During the late 1970s, the education system was exposed to severe criticism from several sources: teachers, parents, the media, and employers. The crux of much of this criticism was that the education system failed to adequately prepare students for life, work, and personal and social development (Heffernan, 1991). This led to development programmes to help secondary school students transition into the working world, such as the Vocational Preparation and Training Programme (VPTP) (McNamara, 1991). TY was also among the earliest educational initiatives (starting in 1994) to assist in setting up students for success when leaving secondary school (Heffernan, 1991). Since then, there has been exponential growth in the programme, especially since the 1990s, with over 600 schools now offering TY (Moynihan, 2015).

The TY programme outlines three goals that must be met by each school undertaking the programme. Firstly, they provide education that allows students to mature with an emphasis on personal development skills, including social competence and social awareness—secondly, fostering general, technical, and academic skills with a focus on self-directed learning. Lastly, gaining experience in working life is usually done through work experience. One of the main selling points of TY for students is the promise of no examinations and the opportunity to partake in various activities (Clerkin, 2018; Smyth et al., 2004). Core subjects (English, Irish, mathematics) and other traditional subjects (science, geography, languages, etc.) must be taught to students during this time. However, the critical component of TY is the expectation that teaching and learning are much more student-focused, using a more comprehensive range of learning methods and greater student participation (Department of Education, 1993). A crucial principle of TY is that it is not to be seen as the first year of the senior cycle leading to the Leaving Certificate examination but instead a transitional period from the junior cycle to the senior cycle (Department of Education, 1993).

Engagement with the TY programme has exhibited certain benefits, which have been presented in the research:

- Form new friendships and socialise with other people in their year group
- Build better relationships with teachers
- Better equipped to deal with the LC examination
- Opportunity to ascertain and cultivate skills and interests outside of school
- Provides students with new experiences by participating in different activities throughout the year
- Develop a greater sense of responsibility, autonomy, self-confidence, leadership, and interpersonal skills
- Greater understanding of future vocational aspirations and maturity. (Egan & O'Reilly, 1979; Smyth et al., 2004; Moynihan, 2013).

Clerkin (2018) parallels the traditional gap year students may take and the Irish TY programme. A gap year is time spent away from education or employment before embarking on education or long-term employment. It allows a young person to discover their identity and interests, all while battling the quest of deciphering their future goals (Parker et al., 2015). TY was established under similar auspices. However, it allows students to have a similar gap to reflect but in a more systematic manner. Each school has the liberty to devise its own TY programme, guided by a set of guidelines set by the Department of Education. Out-of-school activities play a vital role in the TY experience. Students can travel to gain insight into different cultures, participate in community work, design, host events, and engage in work experience placements (Jeffers, 2015). The interaction of these experiences outside of school has led to students thriving and having a positive view of themselves as prospering young adults (ISSU, 2014). Martin (2010) reported similar findings in his research regarding Australian students who took a gap year before entering university. Martin (2010) conveys that taking a gap year could help alleviate any issues before entering further education and, in turn, give individuals a more dynamic set of skills to help aid academic motivation and behaviours. TY allows students to participate in group work more than in previous years in schools; this has been shown to improve interpersonal skills (Jeffers, 2007). This has similarly been prominent in research examining gap-year students, with participants reporting that their involvement with voluntary activities during this time was one of the most significant outcomes (Bell,

2007). This may be the first time young people have had to learn to cooperate with other individuals or take instructions from an employer in an official setting. Jones (2013) highlights how these skills are essential for long-term and future educational and vocational success. This can also be true for TY students moving into the senior cycle, tackling their LC examination and then on to further education or employment.

Although there are numerous benefits that research has found regarding TY, it is essential to address some problems that a minority of students have encountered (Clerkin, 2018; Jeffers, 2007; Smyth et al., 2004).

Problems students have in TY:

- Feeling as though they have very little to do in classes
- Feel bored and that TY is a waste of their time
- Difficulty adjusting back into traditional classes for their senior cycle
- Parents and students fear that study habits may be forgotten if they participate (Jeffers, 2007)

2.5.2 Transition Year and High-Ability Students

Some schools in Ireland make TY mandatory in the belief that all students should benefit from the notable outcomes of the programme. However, evidence (Clerkin, 2019) suggests that those students who want to refrain from participating do not reap any of the benefits of TY and compromise the merits for motivated students in the programme. This is congruent with Self Determination Theory (Deci & Ryan, 1985; 2000), which theorises reduced intrinsic motivation and poor engagement in any pursuit which has been mandatory for students to participate in.

Addressing the significance of social and emotional development in education has come to the forefront around the globe, highlighting the novel TY programme in Ireland. Examining other European educational systems, the most comparable programme to TY is the Danish 'after-school' option which is akin to a universal view of students' development alongside some work-related experiences (Katznelson & Juul, 2013). In Korea, the Free Learning Semester (FLS) programme was piloted in 42 middle schools in 2013 (Lee, 2013). Following a three-year trial, the FLS was extended nationally to all middle schools in Korea due to its success. Like TY, it is an exam-free semester, and while students still have core subject classes, they do not have any pressure on exams.

Approximately one-third of the time is given to activities or classes that vary from the traditional curriculum (OECD, 2016). FLS is based on the Irish TY programme experience, British research on gap years and the Danish 'after-school' programme (Lee, 2013). However, a critical difference between TY and FLS is the age at which students participate. Korean students gain this opportunity to complete one or two semesters at a much younger age, around 13 years old, in the first year of middle school. TY students are about to enter the final years of secondary education when they can participate in the programme. The FLS is successful with high-ranking student satisfaction and participation (Ministry of Education of Korea, 2017).

Now with a clearer impression of what is meant by giftedness and the educational landscape in Ireland, this review will now turn to the specific practice The following section overviews two educational practices in gifted education: acceleration and enrichment. It draws attention to dual enrolment, early entrance programmes, belief alterations, and research.

2.6 Acceleration & Enrichment

Acceleration is a type of academic intervention which allows students to progress faster through traditional curricula than their same-aged peers (Colangelo & Assouline, 2008). Enrichment programmes enable students to explore more in-depth subject areas and encourage higher-level thinking and creativity (Kim, 2016). Research has demonstrated that gifted students' academic performance improves when enrolled in accelerated or enrichment courses (Assouline et al., 2015). Although enrichment and types of acceleration may sometimes be used together as the basis of many gifted programmes, it is fundamental to understand the distinction between them. Acceleration requires pertinent educational planning to ensure a match between the level of academia and the readiness and motivation of the individual Colangelo and Assouline (2008) proclaim is the essence of gifted education.

Table 2.1 Examples of Acceleration & Enrichment in Gifted Education and Talent Support

Acceleration	Enrichment
○ Early School Entrance	○ Individualisation
○ Mixed Age Groups and Flexible School Entrance	○ Extracurricular Workshops
○ Grade-Skipping (Individually or in groups)	○ Additional (Advanced) Courses
○ Participation in Classes of Higher Grades	○ Nationwide Academies & Competitions
	○ Cooperation with Universities & Business Companies
	○ Student Exchange Programmes

Note. Adapted from Fischer, C., & Müller, K. (2014). Gifted Education and Talent Support in Germany. *Center for Educational Policy Studies Journal*, *4*(3), 31–54.

2.6.1 Roots of Acceleration & Early Entrance

Brody and Stanley (1991) highlight that within the last century, the United States grouped students based on their chronological age. This remodelling of the education system was implemented due to the United States becoming more industrialised and integrating many immigrants settling into the country. Before this, it was commonplace to see young students in American colleges (Muratori, 2007).

In the time of World War II, the United States acknowledged the need to get young able men "into and out of college faster so that they could help in the war effort. Colleges were encouraged to accept young entrants as freshmen" (Brody & Stanley, 1991, p.103). Notable universities, including Ohio State University, the University of Chicago, and the University of Illinois, accepted young students who were successful academically (Daurio, 1979). During the 1950s, amid the Korean War, there was another surge of drafting young able men and again an interest in accelerating their education quickly. The Ford Foundation conducted significant research on acceleration. It helped fund

educational advancement by providing scholarships for young men and women under the age of 16.5 to attend any 12 universities for two years before drafting with the military from 1951 to 1954 (Southern & Jones, 1992). Following the end of The Ford Foundation funding early entrants in 1954, The College Board Advanced Placement program was established in the 1950s, highlighting the positive impact early entrance into college had for the United States youth (Brody & Stanley, 1991).

During the 1960s, there was a dynamic change in the country, and less attention was placed on gifted education. More focus was placed on the underprivileged, leading to a decline in many gifted programs (Brody & Stanley, 1991). In 1972, the release of the Marland Report and the inception of the federal Office of Gifted and Talented Education saw another shift back to focusing on the nation's gifted students. Lupkowski and Assouline (1992) described this continual shift of attention on gifted education from policymakers and the public as a "swinging pendulum".

In 2004 Colangelo, Assouline and Gross authored a national report, *A Nation Deceived: How Schools Hold Back America's Brightest Students,* summarising more than 50 years of research on acceleration for gifted students. Since this was published, there has been a notable change in discussions regarding acceleration. It helped dispel previously held myths such as lowering the self-esteem of the student or other students in their class (Colangeo & Assouline, 2004). In 2015, a ten-year follow-up was published called *A Nation Empowered* (Assouline et al., 2015), which states that extensive research supports acceleration as a positive intervention. It aids gifted students' academic development by providing academic challenges and stimulation and supports their social and emotional development by placing them with like-minded peers.

Some gifted students experience unique challenges when it comes to their self-esteem. On the one hand, they may have exceptional ability in a particular area, giving them a sense of pride and accomplishment. On the other hand, they may feel different or isolated from their peers and may struggle with the pressure to live up to high expectations (Casino-García et al., 2019). To support the self-esteem of gifted students, it is vital to create a supportive and challenging learning environment that fosters their interests and abilities, such as the EUE programme. This can include opportunities for them to work at their own pace, explore their interests, and connect with peers who share their interests. Additionally, it is essential to acknowledge and celebrate their achievements while

recognising that failure and setbacks are a natural part of the learning process. (Casino-García et al., 2021).

Over the last 50 years, research examining acceleration has supported its use in gifted education, outlining the academic and social benefits (Assouline et al., 2015). There are numerous ways for gifted students to accelerate, and it is not just solely the whole grade skipping (Southern & Jones, 2015). Rogers (2015) classified acceleration into grade-based and subject-based acceleration. Grade-based acceleration allows a student to reduce the number of years in school, and subject-based acceleration will enable students to participate in advanced material at an earlier age.

However, there are still negative attitudes towards this intervention. The persisting concern typically pertains to the social interactions of the accelerant (Cross et al., 2018). Colangelo and Assouline (2008) state two reasons why this may be; the first is that accelerated students may passively 'learn' but fail to grasp a proper understanding of the material. This may have negative consequences the further they excel in education. The second reason is a concern regarding students' social development. For example, students leave their similar-aged peers and are placed in a new environment with older students or miss out on key events such as prom.

A prevalent misconception is that students must be accelerated in all subjects to be regarded as gifted. However, many gifted students may possess multiple talents in different areas, also known as multipotentiality. Some students may vary in abilities in other subject areas (Muratori, 2007). Students in The Study of Exceptional Talents (SET) at CTY at Johns Hopkins University reported participating in Advanced Placement (AP) courses while attending high school (Brody, 2005). Many students enrolling in SET are accelerated in mathematics and science but stay with their same-aged peers for humanities courses. AP courses allow highly capable students to enrol in introductory college courses while attending school. Following an exam and the student's results, they may be awarded credit by the linked university, which can be used to exempt them from taking the course in their future studies at the university (Brody & Stanley, 1991).

2.6.2 Dual Enrolment

Dual enrolment programmes were initially intended for high-achieving students pursuing a more academically challenging environment (Tobolowsky & Allen, 2016). However, dual enrolment is no longer an exclusive practice; these programmes have been

implemented nationwide across the United States (An & Taylor, 2019). While there is some research on the effects of dual enrolment programmes on students, there needs to be more research on the experiences and outcomes of gifted students in these programmes (Crabtree et al., 2019).

The concept of dual enrolment aims to provide students with an intellectually stimulating and challenging educational experience (Mansell & Justice, 2014). By allowing these students to access college-level courses, such programmes offer a pathway to develop their talents further, reach their full potential and prepare for college (Dare & Nowicki, 2015). There are several benefits associated with dual enrolment in gifted education. Firstly, it provides accelerated learning opportunities for students. They can engage in coursework beyond the regular school curriculum, which helps to prevent academic boredom and ensures that their learning needs are met (Ledwith, 2013). Dual enrolment allows these students to delve deeper into subjects of interest and explore specialised areas of study not typically available in school (Huntly & Schuh, 2003).

Secondly, dual enrolment programmes contribute to college readiness and transition (Zuidema & Eames, 2014). Students who participate in dual enrolment gain exposure to the demands and expectations of college-level coursework (An & Taylor, 2015). They become familiar with academic rigour, develop practical study skills, and experience a taste of the college environment (Corin et al., 2020). This experience can alleviate the anxiety associated with transitioning from school to college and increase their chances of success in higher education (Henneberger et al., 2022). Another advantage of dual enrolment in gifted education is its enhanced intellectual and personal growth (Ledwith, 2013). Gifted students typically thrive in intellectually challenging environments, and dual enrolment allows them to engage with like-minded peers. The students interact with peers who share similar interests, which gives them a sense of belonging and enables them to develop meaningful social relationships (Riley & White, 2016). Interactions with these peers increase students' understanding of belonging and reduce boredom, negative behaviours, depression, and anxiety (Stambaugh, 2017).

Dare and Nowicki (2015) examined students' motivation for participating in a dual enrolment programme at a university located in Southern Ontario. Participants included 21 high-ability secondary school students in Grades 11 and 12. The programme enrols 100 students annually and offers students to participate in a selected on-campus or

online university course. Students receive university credit and can socialise with other like-minded peers through the programme's social events. Using a group concept map, the researchers concluded seven important themes "(a) university preparation, (b) demonstrating initiative, (c) getting ahead, (d) love of learning, (e) self-fulfilment, (f) seeking challenge, and (g) socialising" (Dare & Nowicki, 2015, p.249).

Participating in university programmes gives students a much more comprehensive selection of available courses that interest them than the traditional school curriculum. This can help students choose their future educational and vocational journey. Dual enrolment allows gifted students to challenge themselves and helps mitigate feelings of boredom and frustration in school. Students gain a novel opportunity to engage with university life, identify personal interests, and participate in challenging academic work compared to the secondary school level. The experience of being part of university life can aid students' transition to university (Dare & Nowicki, 2015). The current study expects similar findings for the Early University Entrance (EUE) programme students in CTY Ireland.

2.6.3 Early University Entrance Programme

CTYI runs a dual enrolment programme called Early University Entrance, where high-ability Transition Year (TY) students attend CTYI's home university, DCU, one day a week while still attending school during the academic year. These students can attend one or two semesters, studying two modules at a time. from degree courses offered by the university. (See Table 2.2).

Table 2.2 Semester 1 Early University Entrance Courses

EUE Programme	Module(s)	Linked DCU course
Business	• Management Accounting for Decision Making • Introduction to Microeconomics	Bachelors in Business Studies
International Relations	• Introduction to Global Governance • Introduction to International Relations & Security	B.A. in International Relations
Engineering	• Introduction to Electronics • Materials Engineering	B.Eng (Common Entry to Engineering)
Sports Science	• Introduction to Athletic Therapy and Training • Biomechanics 1	B.Sc. Sports Science and Health
Computer Science	• Introduction to Computer Hardware • Introduction to Computer Systems	BSc in Computer Science
Biology	• How Life Works 1	Common Entry into Science
Psychology	• Child Development • Cognitive Psychology	B.Sc. in Psychology
Physics	• Light and Optics • Motion & Energy	B.Sc. in Applied Physics
Law & Politics	• Irish Legal System • Irish Political System	B.A. in Economics, Politics & Law
Philosophy	• Introduction to Philosophy • Environmental Philosophy	based on modules from the Bachelor of Arts (Joint Honours)

It is important to note that EUE does not offer students credits for course completion as other programmes do. However, this does not deter the highly motivated students who participate and still choose to complete the assignments and examinations at the end of the course (Woods, 2023). Offering these programmes to students on a university campus gives them a glimpse of what higher education classes are like in lecture halls and can be a driving force for future aspirations (O'Reilly, 2018). During the

programme's pilot run, 20 participants, with an average age of 15, attended EUE throughout the two semesters. The TY students participated in these courses alongside first-year university students. Ledwith (2013) examined the development of the students throughout the EUE course on an academic, emotional, and social level. Students integrated well and made new university friends whom they could relate to and have as a support system. The students performed just as well and some even better than their first-year counterparts. They discussed how they felt better equipped going back to 5th year in their traditional school and had a better idea of their academic goals and direction (Ledwith, 2013).

Since the pilot, there have been adaptations to the course, one important being that students no longer enter classes with first-year university students. Instead, they are now their own cohort mingling with high-ability students their age. This has transformed the course by firstly having more places on the course for students, it is easier to fit in with the school week and means students from further afield in the country can come. The students engage with like-minded peers, giving them a sense of belonging and can flourish into meaningful social relationships (Riley & White, 2016). In the 2021-2022 academic year, over 500 students attended EUE showing the success and growth of the programme.

EUE allows TY students to study third-level, introductory modules, which can result in reaffirming their planned course of study or change their minds. Students also described that following the work experience placement, they had a heightened conception of the significance of studying in the subsequent years, causing them to work harder in school. EUE gives students a glimpse into the challenging coursework they must complete in third-level education and may motivate them to strive towards their future goals. EUE students can leave their traditional classroom once a week and experience more self-directed learning prevalent in third-level education. The researcher of the current study hopes to see similar findings regarding EUE students based on previous research.

2.6.4 Early Entrance

Programmes have been developed globally in numerous higher education institutions to allow gifted students to enter third-level education while still fostering their social and emotional needs. With so many different programmes, there can be many distinguishing factors between them. It allows the students to socialise and meet like-minded peers, some maybe for the first time (Muratori, 2007). The main goal of these programmes is to aid in the student's academic, social, and emotional development. Although the EUE programme is fundamentally a dual enrolment programme, it shares some similar ethos to Early Entrance programmes. Thus, it is useful to gain an understanding of the research examining Early Entrance and the impact it has on gifted students.

2.6.5 Academic Performance

Considerable research has been undertaken to understand how these programmes work and their impact on students (Edmunds et al., 2012; Olszewski-Kubilius, 2002; Sayler, 2015). Research into the academic achievement of students who entered college early, including long-term impacts such as their vocation, cite high achievement and success (Olszewski-Kubilus, 2002). Accelerated students have demonstrated that they often academically outperform their older classmates (Ledwith, 2013; Wells et al., 2009).

Kulik (2004) conducted meta-analytic reviews of research examining acceleration, concluding that accelerated students performed better academically than their peers. He stated that acceleration encourages motivation regarding students' educational aspirations in university and beyond. Research examining students attending the Texas Academy of Mathematics and Science (TAMS) has shown positive results (Sayler, 2015). Most students have earned exemplary grades, earned scholarships in prestigious universities, and attended renowned graduate programmes (Jones, 2011).

At the University of Iowa, a study of the inaugural class of the National Academy of Arts, Sciences and Engineering found that early entrants earned a first-semester GPA greater than that of a first-year student at the University of Iowa (Muratori et al., 2003). The Special Class for the Gifted Young (SCGY) is an established residential early college entrance programme at the University of Science and Technology of China (USTC). It has ties with the Chinese Academy of Sciences. This programme has positively impacted students, gaining academic and professional success (Dai & Steenbergen-Hu, 2015).

Muratori (2007) examined early entrance students' experience in college and reported that they were academically successful and content with their decision to enter college at an early age. She states that enrolling on a coordinated programme, with ample support and friends, has considerable advantages over entering college early alone. It is important to note that adjusting to college for most individuals is difficult, not just for students who enter early. It is a time when students must adapt to a new and challenging academic and social environment (Brody et al., 2004; Muratori et al., 2003).

2.6.6 Emotional-Social Adjustment

Social adjustment can be described as the capability to build and maintain gratifying relationships with others. Emotional adjustment encompasses individual acceptance of circumstances; this may constitute resigning one's attitudes and emotions adequately (Schuur et al., 2021). Research findings state that acceleration leads to positive social adjustment or no evident change. Early entrants are socially and emotionally well-adjusted, with no additional challenges beyond those of typical college students (Rinn, 2007).

However, there have been some cases where students have not adjusted well to early entrance to college (Montour, 1977). Researchers at TAMS concluded that students' social adjustment to the Texas Academy of Mathematics and Science contributed positively to their well-being, and most participants in this programme developed solid social relationships (Boazman & Sayler, 2011). However, during this research, some students reported that they left their home and school environments before they felt ready, a lack of social skills to cope independently and stress as factors would make them not want to relive their early entrance experience (Muratori, 2003). In her research, to understand the factors that led to or hindered academic success. Muratori (2003) concluded that personal attributes are essential covariates of academic success, and challenges that students experience before entering college are likely to manifest if not addressed. These results have been echoed by other researchers in other early college entrance programmes (Assouline et al., 2015).

Being surrounded by like-minded peers helps gifted students to adjust well in acceleration programmes, even with differences in chronological age. Gross (1989) mentions that accelerated students had *found their tribe* and could be themselves around like-minded peers who they felt understood them. the accelerated participants reported

increased self-concepts and reduced self-criticism. Overall, research concludes that accelerated students who participate in early entrance programmes have a favourable social-emotional adjustment once there is a rigorous selection process, family support, peer relationships in the programme and adjustment to college life (Brody & Muratori, 2015).

2.6.7 Early Entrance Long-Term Impact

The University of Washington (UW) has facilitated the Early Entrance Program (EEP) since 1977 and the UW Academy (UWAcad) since 2001. These two early entrance programmes are facilitated through the Robinson Center for Young Scholars. EEP is a two-step programme that admits a select cohort of students following 7th or 8th grade into the Transition School (TS). This intensive college preparatory programme compresses most of the high school curriculum into three academic quarters. After successfully completing TS, students are admitted to the EEP programme and are regarded as freshmen at the UW (Halvorsen et al., 2013). The UWAcad accept 35 students who withdraw from 10th grade and enrol as freshman in UW (Hertzog & Chung, 2015). Decades of research by the Robinson Centre using quantitative and qualitative research (Noble & Childers, 2008) has enabled continuous programme development to aid high-ability students in further education. Research at the Robinson Centre has shown that early entrants achieve academically, socially, and emotionally (Hertzog & Chung, 2015).

A 15-year follow-up study investigated the impact of EEP on graduates (Noble et al., 1993) Educational, career, and socioemotional attributes were examined to see how the programme impacted students as adults in their personal and professional lives. Alums of EEP were compared to two other groups – students who were eligible for the programme but remained in high school and non-accelerated National Merit Scholarship finalists. Results concluded that most participants were content with their choice to attend EEP, and a significant proportion had ventured to graduate schools than the comparison groups. Students who accelerated into EEP were found to be as well-adjusted socially and emotionally as their counterparts who remained in high school (Noble et al., 1993). A 25-year follow-up study by Hertzog & Chung (2015) examined EEP alums. Results concluded that participants attained an above-average salary, felt satisfied with their choice to attend university early, and were happy overall.

The Study of Mathematically Precocious Youth (SMPY) is the longest-running longitudinal survey of talented children. Their research illustrates that the effectiveness of enriching talented students may only become apparent decades later, such as advanced degrees in STEM disciplines, publications, and tenure at research universities (Lubinski et al., 2014). Bernstein, Lubinski & Benbow (2021) conducted a 35-year longitudinal study that examined the psychological well-being of its accelerated participants; there was no correlation between educational acceleration and psychological well-being. Additionally, the psychological well-being of participants in both investigations exceeded the national probability sample mean. Overall, the researchers concluded that there is no correlation between academic acceleration and shortcomings in psychological well-being later in life. This is consistent with previous research examining whether academic acceleration may cause adverse psychological well-being for gifted individuals (Assouline et al., 2015; Gross, 2006; Robinson, 2004).

With such an ample scope of early college options and the many factors that can impact a student's adjustment to college, it can be hard to generalise findings to all early entrance programmes (Assouline et al., 2015). Due to the numerous and varied gifted curricula and programmes, comparing results with varying student populations is challenging. (Callahan et al., 2015). Overall, it is ultimately up to the individual student to decide what is best for themselves and weigh the costs and benefits of choosing to accelerate. When the optimal practices are implemented for a student, the social and emotional needs are not impaired (Park et al., 2013). The research findings conclude that acceleration, such as early entrance programmes, positively impacts gifted students, and that early entrants are socially and emotionally well-adjusted.

The following section overviews gifted students' transition into university. It draws attention to the challenges these students may face, and the research conducted in this area.

2.7 Gifted Students Transition into University

Despite the intense focus on gifted children in academic settings, more research needs to be conducted on gifted university students, partly because it is commonly considered that the postsecondary system satisfies the needs of exceptional individuals readily and successfully. Research comparing gifted students attending university with those who did not reveal that individuals who participated at a third-level institution

reported increased life satisfaction (Holahan et al., 1999). In their study, Perrone-McGovern et al. (2011) interviewed gifted individuals about the impact of their life choices on their overall life satisfaction. Participants reported that their decision to attend university led to positive outcomes in achieving career aspirations and forming healthy relationships.

First-year adjustment is thought to be the time during which academic failure is most likely to occur (Pascarella & Terenzini, 2005). Research indicates that first-year adjustment predicts programme perseverance, completion, student achievement, and well-being (Nora et al., 2005; Pascarella & Terenzini, 2005). According to researchers, academic adjustment, social adjustment, personal–emotional adjustment, and institutional attachment are the four primary categories that make up the university adjustment phenomenon (Baker & Siryk, 1986). Academic adjustment is how first-year students acclimate to academic expectations in their newfound college or university, as shown by their academic achievement and interest in their studies. The amount to which pupils were able to adapt to a new social setting is a social adjustment. The personal–emotional adjustment reveals how the pupils have emotionally acclimated and whether they encounter emotional concerns such as stress, worry, and insomnia. Institutional affiliation demonstrates students' commitment to their studies and satisfaction with their institution of choice (Baker & Siryk, 1986).

Within the varied student population, gifted individuals have gotten less academic attention in higher education studies (Mendaglio, 2013). Universities are interested in attracting the most brilliant students globally, but little attention has been paid to transferring exceptional pupils to higher education (Rinn & Plucker, 2019). There is a misconception that gifted individuals do not have academic and social-emotional difficulties, do not need assistance, and will flourish by themselves (Peterson, 2009). Consequently, there needs to be more empirical research about the real experiences of talented individuals in higher education (Rinn & Plucker, 2019).

According to the existing evidence on gifted students' postsecondary experiences, gifted individuals adapt academically better to tertiary education when they have enough opportunities for intellectual development and academic challenge (Hébert & McBee, 2007). Seven talented individuals who participated in an honours programme during their university years were interviewed by Hébert and McBee (2007) on the programme's

influence on them. This research demonstrated that these students felt lonely as teens but discovered kinship and a sense of belonging when they joined the honours programme. In addition to fostering emotional development, the programme offered mental stimulation and educational challenges (Hébert & McBee, 2007). The honours programme allowed students to enhance their skills in various ways by exposing them to a community of students engaged in worthwhile extracurricular activities, such as disseminating their research, creating newsletters, and organising class trips. This gave them intrinsic motivation for their true interests and a chance to enhance their talents. The programme provided a supportive framework from benevolent adults to like-minded peers that encouraged academic and social adjustment while fostering a positive identity as a gifted university student. This study's findings remind educators that not all talented individuals are predestined for Ivy League schools and that the academic, emotional, and social requirements of gifted university students in smaller, less prominent colleges remain significant.

In a more recent study, Mammadov, Hertzog, and Mun (2018) interviewed 26 early university entrance alums from both the Early Entrance Programme and UW Academy. The students were enrolled into college as Honours Students after 10th grade. According to the findings, early college enrolment offered a more challenging and independent environment than high school, more autonomy over academic and social choices, and satisfied students' strong desire for belonging, autonomy, and competence. The early college admission programme allowed students to meet with others of the same age with comparable academic abilities and aspirations.

However, research indicates that the first year of college might be challenging for gifted students owing to their distinctive qualities and difficulty adjusting to new academic requirements (Balduf, 2009). Consequently, some gifted students need help adjusting to a unique educational environment. Adapting to different learning methods is often cited as one of the most challenging aspects of the first-year student's adjustment process. Gómez-Arzaga & Conejeros-Solar (2013) show that gifted students are better adjusted academically if they can reassess their old learning patterns considering new academic standards and create good study techniques. Social adjustment to the university environment is also essential for academic achievement, especially in the first year (Gómez-Arzaga & Conejeros-Solar, 2013; Rinn, 2007). Literature indicates that most gifted college students have a busy social life (Boazman & Sayler, 2011). They often

engage in social events and clubs and can form new social bonds (Bain & Bell, 2004). Literature reveals that individuals may suffer from emotional isolation and poor self-esteem if they fail to retain new connections and do not receive enough support in their new social world (Gómez-Arzaga & Conejeros-Solar, 2013).

Transitioning from secondary school to higher education is also essential for their emotional growth. Although gifted students are believed to be emotionally well-adjusted to university life due to high academic skills, some studies have found that academic and social issues gifted students face in tertiary education may negatively impact their emotional adjustment to university life. For instance, starting university is the first time they can compare themselves to intelligent peers and individuals with even better academic aptitude, which causes them to doubt their giftedness (Hébert & McBee, 2007). However, Olszewski-Kubilius (1998) states that high levels of success and contentment with the environment may enhance gifted students' self-confidence, maturity, and ambition. Although entering university is often seen as a good experience with several new chances, it is also followed by an adjustment period in which first-year students undergo numerous lifestyle changes (Chickering & Reisser, 1993). The living circumstances of students change, requiring them to handle additional academic duties and separation from school friends and family (Credé & Niehorster, 2012). Some talented students may suffer from homesickness due to separation from significant others (Muratori et al., 2003) and isolation (Hébert & McBee, 2007) if they cannot adapt to the university's atmosphere. According to Baker and Siryk (1984), the more dedicated and happy students are with their choice to pursue higher education, the greater their attachment or feeling of belonging to the educational institution. The quality of the connection between the institution of choice and the talented student is one of the most critical adjustment elements since students who are less happy with the quality of their experiences at university are less likely to thrive academically (Hébert & McBee, 2007). Students dedicated to earning a university/college degree are more likely to persevere (Baker & Schultz, 1992).

The current study occurred during the Covid pandemic when students had to switch to online learning. We will now explore the impact distance learning had in Irish secondary schools and especially for gifted students.

2.8 Distance Learning in Irish Secondary Schools

In 2020, the COVID-19 pandemic caused a global shutdown; measures adopted by many countries worldwide included social distancing, home isolation and the closure of schools (Murphy, 2020). Mohan et al. (2020) conducted a comprehensive report on the impact COVID-19 had on secondary schools in Ireland; engaging and retaining students was a significant difficulty for schools during this time. Secondary schools adopted online learning, which was executed in various methods, resulting in substantial variations in the quality of the distance learning experience. The results show that many students remained engaged during the lockdown, although a few struggled to engage or disconnected entirely. In addition to the challenges created by certain students' difficulty accessing online learning, school administrators cited the influence of student motivation, family issues, and the loss of the school environment on students' ability and willingness to engage. Lockdown had a more significant effect on extrinsic motivation than on intrinsic motivation. Some schools found increased self-regulated learning among students with strong intrinsic motivation. Several respondents noted a higher disengagement rate among students with low academic achievement, showing that academic competence or interest moderated the consequences of the move to distance learning (Mohan et al., 2020).

In Ireland, the abrupt closure of school premises delayed the sixth-year students' preparations for taking the Leaving Certificate exams in June 2020. Moreover, as the epidemic developed, students faced an extended apprehension over the status of State examinations. Practical assessments, including oral examinations in Irish and Modern Foreign Languages, were terminated immediately after the March 2020 closure of school premises, and students received full marks for any such examinations (Department of Education and Skills, 2020a). Later, in May 2020, it was announced that all written Leaving Certificate tests would be cancelled and replaced with calculated grades, including for all practical assessments for which students had previously been granted full marks (Department of Education and Skills, 2020b). This marked the end of the Senior Cycle and all second-level study for Leaving Certificate students when they were confined to their homes due to travel restrictions. Not only were Leaving Certificate tests cancelled, but other significant events in students' life, such as school graduations, could only be held remotely. This is a crucial category among the population of secondary schools that the shutdown may have seriously impacted (Mohan et al., 2020).

Émon et al. (2021) conducted 14 interviews to examine the impact of COVID-19 restrictions on Irish secondary school graduates' lifestyle, education, and future aspirations. Researchers classified the diverse participant responses into the following categories: those who were shielded from the harmful consequences of the pandemic, those who suffered from anxiety and uncertainty, and those who felt dissatisfied upon recognising the inadequacy of policymaking. Émon et al. (2021) found that some teenagers can tap into their resources (such as creativity and social networks), while others require extensive support to compensate for lost opportunities and isolation caused by the pandemic (Smyth & Murray, 2022). The lockdown thrust all participants into a new way of living in which they had to develop greater independence by establishing routines and organising their time for education, recreation, and sleep. This was difficult for most participants; some struggled to devise their routines and cope with online learning (Smyth & Nolan, 2022), and others found it easier to accept the reality of the shutdown and move on. Despite the difficulties provided by the pandemic, Émon et al. (2021) hypothesise that a considerable proportion of young people will acquire positive "learnings" and assets from it since they will emerge with a strong feeling of coherence and responsibility and more refined abilities in developing social networks.

2.8.1 Distance Learning in Gifted Education

Technology allows teachers to deliver differentiated material for gifted students and can be used as an academic and creative channel (Periathiruvadi & Rinn, 2012). Distance education programmes established for gifted students help accelerate their learning, enrichment in interest areas, or differentiate educational resources (Olszewski-Kubilius & Limburg-Weber, 2002).

Successful gifted online programmes were established before the pandemic, including Stanford's Educational Program for Gifted Youth (EPGY) and Johns Hopkin's CTY *Online*. The Iowa Online Advancement Placement Academy provides online AP courses for rural Iowa students (Baldus et al., 2009). Wallace (2009) conducted a study with 690 participants enrolled in online CTY programmes. She describes two ways of online communication: asynchronous and synchronous interaction. The former includes real-time interactions such as live streaming of class (Zoom), and the latter is an interaction done on an individual's own time, such as discussion forums, emails, and a collaborative document.

Wallace (2009) stated that online learning benefits gifted students as it allows challenging material to be differentiated for individual students without grouping them or joining a more traditional brick-and-mortar school. Online programmes aid gifted students who may not be able to access available services due to where they may live, for example, but use technology (Chen et al., 2013). Technology and online programmes can also play a pivotal role in gifted students connecting to other like-minded peers, academic collaboration, and mentors in specific areas of interest. They can mitigate any feelings of isolation (Pyryt, 2009).

Another benefit of distance education is the flexibility this gives to students to participate and complete any coursework (Ceylan & Umdu Topsakal, 2021). For students to be successful in distance education programmes, they must demonstrate skills such as responsibility that allow them to organise their academic work independently. Distance education programmes allow students to oversee their academic progress and to become more disciplined and independent learners while working at their own pace (Zamfir, 2020).

Potts (2019) conducted a small-scale study examining gifted students' attitudes towards online learning. The participants included five highly gifted male students aged 11- and 12- years old participating in an online writing course. Two students participated in the study entirely online, which took place once a week via Blackboard Collaborative; the other three partook in a hybrid model where they could also meet with their instructor physically in a classroom twice a week and participate online. Overall, Potts concluded that the gifted students did not prefer the physical environment the classes held once the academic content and instruction matched their ability.

An important finding from her study highlights the relationship between participants' enjoyment of the online course and their assessment of the social environment. All participants mentioned a preference for more social interactions with their peers, which seemed to play a pivotal role in whether they would consider participating in another online course. In the interviews, all participants stated a proclivity for interactive group work rather than self-directed learning seen in other programmes (some of them participated in courses in Khan Academy which they described as a lonely experience).

Potts (2019) concludes that this contradicts the myth held by individuals that all gifted students do just fine on their own or prefer this type of learning. One reason students may have felt there were fewer social interactions is due to the online tools being used for communication, such as writing on discussion boards and crafting emails. This is a vast change from the typical environment where teachers and students can immediately communicate through spoken words, body language, and facial expressions (Avgerinou & Andersson, 2007). However, there are disadvantages to distance education, including needing help to communicate with the teacher directly, possible technical issues, and difficulty completing group work (Ceylan & Umdu Topsakal, 2021). Potts and Potts (2017) highlight that transitioning from the traditional face-to-face classroom to distance education can be challenging and incompatible with all gifted students.

The world going into lockdown during this time disrupted gifted students' daily activities. They reported feeling like they were not doing anything important, resulting in isolation, frustration, and loss of motivation (Aboud, 2021). CTYI served over 4,000 students online in various courses during the COVID-19 pandemic (CTYI, 2020). It was the first time these programmes moved to a fully online platform, including EUE. During these unprecedented times, students had to adapt to online learning.

Wolfgang and Snyderman (2021) conducted qualitative research exploring the experiences of 53 teachers and 110 parents of gifted students during the COVID-19 pandemic in Pennsylvania. Parents stated that during this time, there was a lack of challenge and enrichment for gifted students due to teachers being restricted by not teaching new material and technology issues. During school closures, numerous schools used asynchronous learning tools, allowing students the flexibility to complete their work and accelerate in subject areas. Wolfgang and Snyderman (2021) found that asynchronous learning must match the type of learner the student is to be beneficial. For students who did not enjoy asynchronous learning, parents and teachers reported that this type of instruction did not challenge them and needed more excitement and engagement for the schoolwork. Parents and teachers of students who did find asynchronous learning beneficial highlighted the autonomy it gave students to complete work at their own pace and explore their talents and interests without the constraints of a traditional school timetable.

Researchers also found that, based on interviews with parents and teachers, students missed socialisation with their peers the most. This included like-minded peers, friends, classmates, and teachers. Students miss out on participating in their extracurricular activities, which is when they get to challenge themselves in something they find exciting and passionate about. Wolfgang and Snyderman (2021) highlight that school closures affected gifted students' social and emotional well-being. Factors included a lack of socialisation with like-minded peers, feeling detached from the school environment physically and psychologically, and loss of experiences with their passion and interests. However, parents and teachers noted that some students flourished engaging in distance learning. The absence of social stressors during this period greatly benefited more introverted students. Students also enjoyed the increased self-governance of their knowledge, which allowed for more sleep leaving students feeling fresh and re-energised.

2.9 Conclusion of Literature Review

This literature review aimed to give readers a better grasp of what it means to be a gifted person and the emergence of specialised educational options. Several of the most well-established ideas of giftedness were evaluated and contrasted. The review presented how it is interpreted in terms of IQ and other types of testing, together with contemporary understandings, to trace its origins in intelligence theory. It also put forth an overview of the Irish education system and gifted education, with much of the research focusing on early university entrance. It was paramount that the literature review presented an analysis of online learning as the current study unfolded during the Covid pandemic.

The following chapter will outline the current study's methodology and research design.

Chapter 3: Methodology & Research Design

3.1 Introduction

This section will discuss the researchers' various beliefs influencing their work and theories. These beliefs provide a comprehensive view of the world and how knowledge is formed. Following this is a thorough overview of the case study methodology, which was chosen as the theoretical foundation upon which to conduct this study will be presented. The research design is then introduced, with an explanation of sampling, and a thorough analysis of the data collection techniques and the justification for their selection follows. Finally, the approach to analysing the quantitative and qualitative data will be explored.

3.2 Ontological Stance

Ontology is the study of what reality comprises and what it is (Uzun, 2016). The primary concern is the nature of reality or what is knowable (Saunders et al., 2009). The researcher holds a pragmatic view. This approach aims to develop new knowledge using human experience as the primary method of understanding the world. This concept is rooted in the Deweyan idea that we should acquire the mind to talk to others. According to Dewey, if we had not spoken to others, we would never have talked to ourselves (Dewey, 1929). Despite the controversial nature of the concepts of reality and truth, the philosophy of pragmatism needs to be more involved in these debates. Instead, it accepts the possibility of multiple realities that can be explored through empirical inquiry.

According to some philosophers, there is an objective reality outside of human experience (Morgan, 2014; Tashakkori & Teddlie, 2008). This reality can only be experienced through human experience, and pragmatist philosophy holds that all knowledge is based on habits and beliefs that are socially constructed. Pragmatists believe that reality can never be determined. They maintain that it is a normative concept, and that knowledge cannot be withdrawn entirely from the experiences, habits, and beliefs of others. For pragmatists, reality is true if it helps them get into a satisfactory relationship with their experiences. On the other hand, the truth is that whatever proves itself to be good has stood the scrutiny of time. Pragmatism refers to the idea that communication is the only way to understand the world around us. It is also concerned with the development of collective meaning and the creation of new knowledge. This research was conducted

to understand the participants' reality and create a framework for their participation in developing new knowledge.

3.3 Epistemological Stance

The concept of epistemology is an important component of philosophy. Knowledge is the subject of epistemology, which investigates what knowledge is and how it is created, adopted, and shared. In this sense, epistemology is concerned with knowledge in that it questions whether it is unbiased and concrete or arbitrary and abstract (Cohen et al., 2006). Regarding its philosophy, pragmatism focuses on the development of actions, defined as the consequences and meanings of actions (Audi, 2010). Dewey claims that knowledge is made possible through interactions between people and their environments (Biesta & Burbules, 2003). Using scientific inquiry, pragmatism allows us to make informed decisions and choices. It enables us to consider the various options available to achieve our goals (Morgan, 2014). The pragmatist states that knowledge is linked to experience (Hildebrand, 2011). Regarding philosophy, pragmatism considers the importance of the various worlds outside the external world, such as the psychological, social, and physical. It claims that knowledge is made and based on the reality of our lives. Despite external knowledge, it is still important for individuals to experience it (Johnson & Onwuegbuzie, 2004).

Using scientific inquiry, pragmatism allows people to make informed decisions and choices. This method will enable them to consider the various options to achieve their goals. Cultural, historical, and social contexts often influence people's actions and experiences. This makes it difficult to rely on past experiences to predict future actions. Scientific inquiry is needed to allow people to make informed decisions (Morgan, 2014). Before acting, people undergo a careful and reflective process that involves making various decisions. Through scientific inquiry, they can develop warranted assumptions about their actions. The outcomes of the process help guide their future actions (Dewey, 2008).

Pragmatism allows for a purist approach and does not limit the scope of its research or the number of types of knowledge that can be studied. Instead, it encourages researchers to critically consider the various interests served by applying a particular kind of knowledge. This method allows them to accept and recognise the validity of different knowledge and research methods (Cornish & Gillespie, 2009). According to the

philosophy of pragmatism, the era of paradigm wars is over, as the two dominant methods of inquiry in the health science field are no longer needed to address society's various problems. Instead, this paradigm encourages the use of different methods of investigation to find the most effective ways to improve the quality of life (Onwuegbuzie & Leech, 2005). Pragmatic researchers believe that the consequences of a study are developed through the process of inquiry. This allows researchers to use a mixed-method approach. This method is regarded as a multi-method approach enabling them to perform effective and efficient research (Hall, 2013). Pragmatists believe using multiple methods is the best way to address complex social problems. This philosophy encourages researchers to use different approaches to find solutions, which aligns with my beliefs and work conducting this research.

3.4 Research Questions

1. *What is the perceived student experience of the EUE programme?*
2. *Does the EUE programme impact student's adjustment to university?*
3. *What impact did COVID-19 have on Irish gifted students?*

3.5 Case Study

Case studies typically focus on studying cases unique to the field (Stake, 1995). They address an issue or an intervention of interest to the researcher. A case study aims to give the researcher a deeper understanding of the issue or an intervention that interests them. It also helps the researcher develop new knowledge and improve their professional practice (Harland, 2014). Case studies are commonly used in the development of studies to generate an in-depth analysis of complex issues. They are an established part of the research design widely used in various disciplines, such as the social sciences. Case studies can be defined in multiple ways. They can be focused on a particular phenomenon or event in the field of study. They can also be used to examine the natural context of the issue. (Crowe et al., 2011). Yin (1984 p.23) defines the case study research method "as an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not evident; and in which multiple sources of evidence are used." Case studies can also provide valuable information on the various factors that affect implementing of a new service or policy initiative. They can also help identify gaps in the program delivery and the potential

advantages of a new strategy (Crowe et al., 2011). This approach best suits the current research investigating the Early University Entrance programme.

Various case studies can be presented in different ways depending on the author. Doing case study research entails choosing a design corresponding to the investigation's disciplinary perspective. Yin (1984) stated that a case study could choose between three main categories: *exploratory, descriptive, and explanatory*. Exploratory designs aim to identify research topics for future study or assess research methodologies' viability. These designs are frequently used as a precursor to subsequent research efforts, and they include fieldwork and data collection before the formulation of a research topic. The descriptive designs aim to account for a phenomenon within its environment comprehensively. Finally, the goal of explanatory designs is to establish cause-and-effect linkages. Their major goal is to identify how events occur and which ones may impact specific outcomes (Hancock & Algozzine, 2006).

The work of Stake (1995) defined case studies into three main categories: *collective*, *instrumental*, and *intrinsic*. In intrinsic case study research, the researcher is focused on conducting a survey to gain a deeper understanding of a particular group, organisation, or individual. Unlike other types of research, this type of study is not focused on developing general theories or generalising the findings to broader audiences. An instrumental case study design aims to provide a deeper understanding of a theoretical problem or issue. This study also focuses on improving the researcher's ability to interpret the theoretical explanation behind the issue. Another type of case study design commonly used is collective case study research, which aims to provide a deeper understanding of a specific issue. This type of study usually involves performing several instrumental cases to improve the researcher's ability to think critically about the issue (Hancock & Algozzine, 2006).

Merriam (1998) also identified three categories of case studies: *descriptive, interpretive,* and *evaluative*. Merriam sees "the case as a thing, a single entity, a unit around which there are boundaries" (p. 27). Although Merriam's definition of a case study differs from that of other authors, she claims it is often used in educational research, particularly when developing new theories. Her case study style is so descriptive that it can provide a strong argument or challenge established theories. Interpretative case studies are typically called analytical cases because of the required level of analysis. They

differ from descriptive case studies because they are more complex and have a more subjective analysis. Evaluative case studies, on the other hand, are more informative and can lead to informed judgements (Yazan, 2015). For the current research study, the researcher will use Stake's (1995) intrinsic case study better to understand the participants' views of the EUE programme and whether it impacted first-year university students' transition into third-level education.

The EUE programme is typically presented as a unique case. It should also be able to explain the various elements and issues involved in the programme. Although other universities worldwide have similar aspects, the EUE programme is unique. It can also be presented as an intrinsic or descriptive case study. Although a purely descriptive case study can contain much information, it would not be able to thoroughly analyse the various elements and issues involved in the programme. An evaluative case study would be best suited to analyse the programme comprehensively. It should also be able to explain the various elements and issues involved in the programme.

Although the type of case study that will be conducted and the overall structure of the survey is usually decided, the researchers also must consider the various factors that affect the decision-making process. One of these is the study context (Yin, 2009). A single case study is ideal if the researcher only wants to investigate one aspect of the study. This type of research allows the researcher to explore new theoretical relationships and question the old ones while getting a deeper understanding of the case (Dyer & Wilkins, 1991). Through case study research, the researcher can also gain a deeper understanding of the behavioural conditions that underlie a phenomenon. This study type can also help explain the phenomenon's process and outcome using qualitative and quantitative data (Tellis, 1997). Case studies typically focus on investigating and exploring contemporary phenomena by analysing limited details about the event or conditions that inspired it. Due to the criticisms about the need for more case study quality, it is important that the researcher thoroughly studies the design of the case studies to ensure that they are effective. Two types of case study designs are commonly used: single-case and multiple-case. In cases where the researcher does not have other cases available, he or she can adopt the single-case design. One of the main disadvantages of a single-case design is its lack of a general conclusion. It can be challenging to provide a comprehensive analysis when the events are rare. Another strategy that can be used to

overcome this issue is to triangulate the study with other methods. The current research study will utilise a single case study, the EUE programme.

Another important factor researchers consider when choosing a case study is the type of research they want to conduct. This type of research is usually conducted holistically. This type of research allows the researcher to investigate the whole organisation. An embedded design is a type of study that features multiple units of analysis. According to Yin (2003), an embedded design is more susceptible to error since it can shift the focus of the study from one aspect to another. For instance, if the researcher zooms in on one part of the study, the unit might become the phenomenon of interest instead of the context. A holistic, single case study is ideal for researching the EUE programme.

3.6 Research Design

The researcher's commitment to pragmatism leads them to undertake a mixed methodological research design to investigate the EUE programme. The current research is based on the various research questions designed to examine the program's impact on the participants using quantitative and qualitative data collection methods. Qualitative methods used consisted of semi-structured interviews and open-ended survey questions. Quantitative methods included psychological scales and questionnaires. The research conducted in this study is based on Walton et al. (2020) hybrid model of mixed-method research design and a case study. Researchers were influenced by Morse's (2003) *QUAL + quan* design but incorporated a case study. This method, which is a parallel mixed design, aims to collect and analyse data more systematically. The study's main objective is to create a richly descriptive case study. Through quantitative methods, researchers can measure certain aspects of the human personality.

Case studies and mixed methods research provide unique advantages to researchers looking to address the complexity of their research problems (Plano et al., 2018). Mixed methods designs may be distinguished on various parameters, such as the research objective and integration points (e.g., Greene, 2007; Guest, 2013). A popular strategy is characterising the design regarding the sequencing and priority of quantitative and qualitative methodologies (Creswell & Plano Clark, 2011). From a mixed methods standpoint, the study most closely corresponded with a contemporaneous, qualitatively driven mixed methods design since the two techniques were used in the same research

period, and qualitative approaches were more important in addressing the study's overall objective. Although the two viewpoints correctly describe the research design, they need to express the complete link between the two approaches.

The researcher struggled to apply existing typologies when envisioning how the two approaches interacted to generate a mixed methods case study methodology. Existing typologies typically need to describe the complexity of mixed-methods research designs (Guest, 2013). Designs for case studies can be differentiated based on the number of instances and the purpose of examining the case (Stake, 2006). Since the EUE programme was analysed via the lens of a single case, the research most closely resembled an intrinsic case study design from a case study standpoint. In other words, it was an investigation in which a case study was conducted to acquire a greater knowledge of the case (Stake, 1995). Mixed methods designs can be distinguished along several aspects, such as a study's objective and integration points (Guest, 2013). Commonly, the design is described in terms of the time and precedence of quantitative and qualitative approaches (Creswell & Plano Clark, 2011). From a mixed methods standpoint, the study most closely corresponded with a simultaneous, qualitatively oriented mixed methods design since the two techniques were deployed in the same research period, and qualitative methods had a stronger role in addressing the study's overall objective.

Although these two viewpoints correctly explain the research design, the link between the two approaches needs to be fully conveyed. Although it is not unusual to have difficulties articulating the complexity of mixed methods studies using current conventions, the researcher found these conventions especially troublesome for using mixed methods thinking in conjunction with case study thinking and examined additional options such as the one adopted by Walton et al. (2020). There is presently no established standard for a case study design that combines the two approaches (Walton et al., 2020). In the Walton et al. (2020, p.447) study, they devised their research design in the following way, "MMCS (QUAL + quan), where MMCS reflects both the mixed methods (MM) and case study (CS) aspects of the study". Features of the convergent mixed methods research design were incorporated into the overlapping methodological strategy. Case studies and mixed methods thinking both had equal importance in the research. The choice of the methodological design represents the researcher's awareness of the uniqueness of the

research design and a desire to stay open to the possibility that it may not conform to existing methodological standards.

3.6.1 Sampling

Sampling serves to choose several people representing the entire population so that results can be generalised (Martínez-Mesa et al., 2016). In case study research, however, generalisation is less crucial, and therefore the emphasis shifts from scientific sampling to the selection of individuals through whom the case can be explored (Stake, 2000). He emphasises that the potential to learn is of paramount importance in sampling.

As this is a case study to gain a comprehensive understanding of the EUE programme and first-year university students transition into university, the participants are either currently enrolled in the programme, past students still in secondary education and past students in their first year of university. In terms of sampling, these individuals might be categorised as a *purposeful sample*: those who were knowingly selected because they have personal experience with a certain occurrence or the subject of the study (Creswell & Plano Clark, 2007). Following the sample selection, the next phase in research design is to determine how and when the data will be gathered. These two design characteristics are discussed, leading to a detailed explanation of the data collection procedures and analysis methods.

3.6.2 Data Collection Efforts

The data was collected from the 59 study participants and placed into one of the three cohort groups. Forty students enrolled in the EUE programme were placed into the *current* student cohort. Nine past students of the EUE programme still attended secondary education and were placed into the *past* student cohort. Finally, ten university students who participated in the EUE programme were placed into the *university* student cohort. The data comprised semi-structured interviews, standardised psychological tests, and open-ended questionnaires.

3.7 Data Collection Instruments

The following section will describe and justify each data collection method employed and describe the data analysis procedures.

3.7.1 Semi-structured Interviews

In qualitative research, interviews are among the most prevalent methods for gathering data. A conversation in which questions are posed to collect information or data constitutes an interview (Turner, 2014). This information can be gathered through structured, semi-structured, and unstructured interview techniques. Using a planned list of questions, researchers collect data through structured interviews. Roulston (2012) states that each interview employs the same questions, allowing them to compare transcripts while preventing the interviewee from directing the topic. This procedure does not permit the interviewee to elaborate on a topic of interest. In contrast, in an unstructured interview, the researcher asks questions in response to the interviewee's reply. This strategy gathers information without predefined questions (Taherdoost, 2022). This strategy permits the respondent to elaborate in-depth on the issue they deem most significant. During an unstructured interview, many vital topics are frequently left unaddressed.

Since both the structured and unstructured methods have drawbacks, the researcher wanted to employ an intermediate strategy to collect data, the semi-structured interview method. In the semi-structured interview, the researcher asks a predetermined set of questions. However, it permits the researcher to ask extra questions if a new or intriguing line of inquiry emerges during the interview (Kallio et al., 2016). This versatility in questioning allows the researcher to delve deeply into a particular topic. For this reason, the semi-structured interview method was utilised to collect data for the current research study.

3.7.2 Questionnaires

Self-administered or self-completed questionnaires are a common method of data collection. Questionnaire research is the collection of data from a sample of individuals through their responses to questionnaires (Check & Schutt, 2012). This form of research permits using many approaches for selecting participants, data collection, and instrumentation. Survey research may employ quantitative research methods (e.g., questionnaires with quantitative data items), qualitative research techniques (e.g., open-ended questions), or combined quantitative and qualitative research approaches (i.e., mixed methods). Surveys are widely employed in research as they are regularly used to

describe and investigate individual interactions. The apparent distinction between questionnaires and structured interviews is the lack of an interviewer (Bryman, 2004).

In recent years, web-based questionnaire software has been accessible with evident advantages. In several research circumstances, open-ended questions may reveal pertinent data that closed-ended questions cannot (Neuert et al., 2021). Singer & Couper (2017) urged the implementation of more open-ended questions and outlined many potential uses, such as examining methodological assumptions and theories, promoting more honest responses, allowing for feedback, and providing an indication of response quality. In addition, they underlined the need to allow respondents to express themselves throughout interviews.

One questionnaire (Appendix E) was given to the *current* students based on Ledwith's (2013) study. A post-programme questionnaire, My Experience of Early University Entrance (Appendix F) was used for the *current* students during their final weeks on the programme and also given to *past* students during the same time of data collection. The questionnaire consists of 16 open questions. The questionnaires were devised by Ledwith (2013) as nothing similar existed.

3.8 Psychological Tests

The study utilised psychological measurements as a quantitative method for analysing various psychological and cognitive efficiency elements. Such quantitative methods are commonly employed to evaluate accelerated programmes (Janos et al., 1989; Ledwith, 2013; Noble et al., 2007). There are two different kinds of tests: parametric and non-parametric. Parametric tests are more rigorous and typically use data from a large population to get a more reliable conclusion than nonparametric ones. To apply a parametric test, three data parameters must be valid or presumed to be accurate; data must be normally distributed, have equal variance and standard deviation, and, lastly, data must be continuous (Kaur & Kumar, 2015). Non-parametric tests are developed to serve a homogeneous niche without regard to their application to a larger population. They lack a normal distribution curve, and when applicable, parametric tests are more revealing than nonparametric ones. It is less likely that inaccurate conclusions would be reached since generalisations about the population are unneeded (Cohen et al., 2007). This approach is applicable even for small sample sizes, which fits into the current research study (Nahm, 2016).

3.8.1 Student Adaptation to College Questionnaire

The Student Adaptation to College Questionnaire (SACQ) (Baker & Siryk, 1999) is a 67-item measure that evaluates university student adaptation. Although it is designed to be completed at any point throughout undergraduate studies, it is commonly administered during the eighth week of the first semester of the first year. There are four subscales: Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment, and Attachment. Each subscale includes several clusters of items. Scores are generated using a summation method, with 34 elements being reverse scored.

The ***Academic Adjustment*** subscale assesses a student's ability to manage the academic challenges of university. It has 24 components organised into four subscale groups:

- Academic Environment – satisfaction with the academic material being studied
- Application – how diligently the student is pursuing university coursework
- Motivation – motivation to engage in undergraduate courses and achieve academic goals
- Performance – evaluating the efficiency of study techniques for academic achievement

Students with low scores on the Academic Adjustment subscale have low-grade point averages, limited control over their learning, and unrealistic expectations.

The 20-item Social Adjustment subscale assesses students' ability to navigate the university's social milieu and cope with related worries. In addition, there are four clusters:

- General Social Adjustment – achievement in social adaptation
- Nostalgia – the capacity to adjust to living away from home and integrate socially
- Other People—Achievement in forming friendships and acquaintances
- Social Environment – overall satisfaction with the social aspects of the university

Low scores on this subscale suggest that the individual is not adjusting well, is less active in college activities, has diminished social skills and confidence in his or her social abilities, and perceives a lack of social support. It also indicates challenges in separating from family assistance and gaining more independence.

The Personal-Emotional Adjustment subscale assesses the degree of psychological strain encountered during university adaptation. Additionally, it identifies any somatic issues. The subscale has 15 items organised into two clusters:

- Psychological – psychological and emotional health
- Physical – physical fitness

Low scores on the Personal-Emotional Adjustment subscale correlate with students who are more emotionally dependent on others, are more likely to access the counselling service, do not deal as well psychologically, and may experience anxiety or depression.

The Attachment subscale evaluates both loyalty to the institution and the degree of that attachment. The subscale consists of 15 items and is divided into two groups:

- General Attachment – satisfaction with attending university
- Attachment to This College – degree of satisfaction with this academic institution

Low scores on the Attachment subscale indicate dissatisfaction with university life and a high risk of dropping out. A high total score implies positive university adaption. The authors caution against a unique interpretation of the complete scale score, as the concept that adaptation to university has several elements is key to the scale, and two students with similar full-scale scores may have quite different adjustment patterns. In addition, they warn against simplistic interpretations of cluster scores, as they contain fewer items and are less stable than subscale scores (Baker & Siryk, 1999).

The scale was chosen because it has previously been utilised successfully in examining the EUE programme (Ledwith, 2013) and other studies on early university entrance (Caplan et al., 2002). The Attachment to This College cluster is insignificant because EUE participants had no other university choice. (However, the Cluster of General Attachment is important for measuring the level of happiness with the academic experience.)

3.8.2 Depression, Anxiety and Stress Scale - 21

The Depression Anxiety Stress Scales (DASS) was created to measure the components of depression and anxiety and compensate for earlier emotional measures' inability to differentiate between anxiety and depression (Lovibond & Lovibond, 1995).

The original DASS consists of 42 measures evaluating depression (DASS-D), anxiety (DASS-A), and stress/tension (DASS-S). Depression is characterised by low levels of positive affect, such as dysphoria, despair, lack of energy, and apathy. In contrast, anxiety is characterised by a mixture of general misery, including irritation, restlessness, trouble relaxing, and impatience. In the factor analysis, a third factor appeared. This factor was designated as "Stress." Later, a shortened version of the DASS, the DASS-21, was created by Lovibond and Lovibond (1995) to minimise implementation time and has been frequently used in clinical samples to screen for symptoms at various degrees of depression, anxiety, and stress (Lovibond & Lovibond, 1995).

This scale was chosen because it was successfully used in other studies examining students' transition into university (Lovell et al., 2015; Mahmoud et al., 2012; Talwar et al., 2016). Construct validity of the DASS-21 subscales has been established by confirmatory factor analysis and agreement with other measures of depression and anxiety symptoms (Henry & Crawford, 2005).

3.8.3 Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (Rosenberg, 1965) consists of ten Likert-type scales with four-point response options ranging from strongly agree to disagree strongly. This scale has five positive statements and five negative statements. When computing the total score, the negative elements' polarity is inverted. This scale provides a unidimensional measurement of an individual's global self-esteem. The higher the score, the greater the individual's self-esteem. It has excellent cross-cultural applicability. In addition, its reliability and validity meet acceptable standards, which is why it was chosen for the current research study. Numerous studies have used the Rosenberg self-esteem scale to examine students' university transition (Gall et al., 2000; Malinauskas & Dumciene, 2017; Salami, 2011).

3.8.4 Satisfaction with Life Scale

The Satisfaction with Life Scale (SWLS) created by Diener, Emmons, Larsen, and Griffin (1985) is arguably the most extensively used measure of life satisfaction. In the initial phase of scale creation, 48 items were reduced to 10 after exploratory factor analysis. Due to the semantic similarity between these ten topics, the answer format was ultimately reduced to five things (Diener et al., 1985). The SWLS, which consists of five

questions measuring respondents' global judgment of life satisfaction and is believed to correlate substantially with emotional well-being, was used to measure life satisfaction. The items include remarks such as "In most ways, my life is close to ideal." Responses are recorded on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). The item answers are added together to generate a total score. Higher scores imply a better sense of life satisfaction. It has been observed that test-retest reliability is high (Diener et al., 1985). Significant evidence has been presented regarding the construct validity of the SWLS (e.g., Diener et al., 1985; Pavot et al., 1991; Pavot & Diener, 1993). Today, the SWLS is employed for a wide variety of research applications on a global scale (Di Fabio & Gori, 2016; Diener et al., 1985; Lewis et al., 1995; Oishi, 2006), including students' transition into university life (Hultell & Petter Gustavsson, 2008; van Zyl & Dhurup, 2018; Wilcox & Nordstokke, 2019).

3.8.5 General Self-Efficacy Scale

Schwarzer (1992) conceived general self-efficacy, which refers to an individual's more global and steady capacity to handle stressful situations effectively. General self-efficacy is a cognitive tool or vulnerability element that may impact an individual's emotions, beliefs, and actions. General self-efficacy indicates an individual's positive self-belief (Schwarzer, 1992). General self-efficacy facilitates goal planning, effort expenditure, tenacity in facing obstacles, recovery, and emotional adaptability (Bandura, 1995; Poyrazli et al., 2002; Schwarzer, 1992). The General Self-Efficacy Scale (Schwarzer & Jerusalem, 1995) was used to evaluate the participants' confidence in their ability to meet various challenging life demands. The scale makes clear reference to personal agency, which is the conviction that one's actions are accountable for positive results. Adjustment to a new academic environment necessitates dealing with a variety of situations and overcoming several obstacles; consequently, general self-efficacy is the most appropriate metric for evaluating the adjustment elements of participants. There are ten questions on the scale. Participants' responses are scored on a four-point Likert scale (1 =not at all true to 4 = exactly true) for each question.

3.8.6 Self-Regulation Scale

The Self-Regulation Questionnaire (SRQ) was devised by Brown, Miller, & Lawendowski (1999) to measure self-regulated learning. The Questionnaire contains 63 items where seven dimensions are measured, positively and negatively framed, and rated on a 5-point Likert scale (1= strongly disagree, 5= strongly agree). Self-regulation refers to a person's capacity to organise, regulate, assess, and change ideas, emotions, and actions to attain individual goals (Brown et al., 1999; Zimmerman, 2000).

3.8.7 Distance Education Learning Environments Survey

Walker and Fraser (2005) established the DELES to investigate the psychosocial implications of distance higher education learning environments. The DELES has 42 items evaluated on six subscales (Table 3.1) on a five-point scale. Respondents evaluate the DELES items. (1, never; 2, seldom; 3, sometimes; 4, often; 5, always).

The DELES is a widely used scale implemented in several published studies (Brown et al., 2022a; Dastidar, 2021; Walker, 2020) and has been found to have validity and reliability (Brown et al., 2022b). This scale was deemed the most appropriate to assess current EUE students' online experience with the programme and university students' transition to third level, mostly occurring virtually due to the global pandemic.

Table 3.1 Distance Education Learning Environments Survey (DELES) Subscales

Subscale	No of Items
Instructor Support	8
Student Interaction & Collaboration	6
Personal Relevance	7
Authentic Learning	5
Active Learning	3
Student Autonomy	5
Enjoyment	8
Total	42

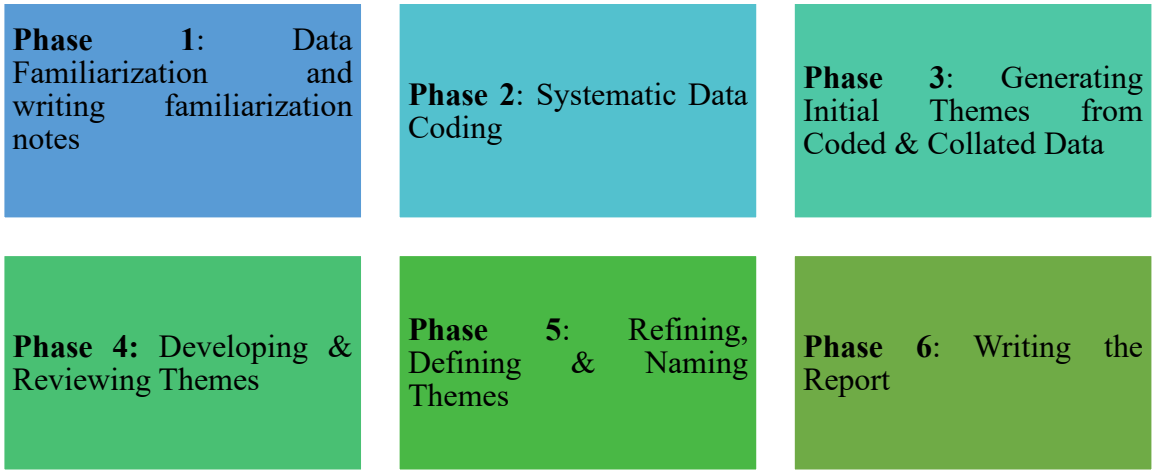
3.9 Reflexive Thematic Analysis

Reflexive thematic analysis (RTA) is a widely obtainable and conceptually flexible technique for qualitative data analysis that promotes discovering and studying patterns or themes within a given data set (Braun & Clarke, 2012). RTA is one of a variety of methods for doing theme analysis. Braun and Clarke have observed that researchers who claim to have embraced RTA often fail to clearly define their application of RTA or confuse it with other thematic analysis methods (Byrne, 2022). The reflexive approach to thematic analysis (TA) emphasises the active involvement of the researcher in knowledge development. Codes indicate the researcher's judgments of patterns of significance across the dataset. RTA reflects the researcher's interpretative examination of the data at the dataset's convergence; the study's theoretical underpinnings; and the researcher's analytical abilities and resources (Braun & Clarke, 2021). It is clearly understood and even anticipated that no two researchers will cross these three criteria similarly. RTA refers to the researcher's reflexive and reflective interaction with their data and the

analytic process. The method of coding (and theme creation) is adaptable and organic and frequently evolves throughout the analytic procedure. Six steps comprise reflexive TA, beginning with data familiarisation and progressing via substantial coding and topic creation to analytic writing (Braun & Clarke, 2021).

Due to the researcher's alignment with pragmatic research, the reflexive approach to TA developed by Braun and colleagues was adopted instead of alternative forms of TA. For example, other forms of TA, such as *coding reliability,* are rooted in post-positivist principles (such as premeditated hypotheses, ascertaining 'accurate' themes, and removing researcher bias while signifying reliability), which do not align with the pragmatic epistemology of the research. At the same time, RTA is an adaptable approach that can provide a meaningful interpretation of data (Braun & Clarke, 2006). RTA also values the researcher's subjectivity and considers it a valuable resource (Braun et al., 2019). As the pragmatic approach of this research theorises knowledge as context-dependent and subjective, the most suitable method for this study was a reflexive TA.

Figure 3.1 Phases of Reflexive Thematic Analysis



Note. Adapted from Braun, V & Clarke, V. (2021) One size fits all? What counts as quality practice in (reflexive) thematic analysis?. Qualitative Research in Psychology, 18:3, 328-352.

Braun and colleagues' (2019) six-phase reflexive TA includes familiarisation with the data, creating codes, developing themes, refining and defining themes, and providing the analysis report. A discussion of each approach in the study is below:

3.9.1 Phase One: Familiarisation

A significant part of the early participation with the data was accomplished through the transcription of the interviews since the procedure allowed for a prolonged time with each interview, both for listening to the participant's voice and for creating the transcript. Many qualitative researchers view transcription as a crucial procedure and see it as the first analysis step (Bird, 2005). The researcher took notes of probable topics of interest for the analysis during transcription.

3.9.2 Phase Two: Generating Initial Codes

After transcribing the data, the researcher comprehensively coded each interview, examining what participants talked about with their experience in the EUE programme. Interviews were coded using Nvivo 12, which helped with theme building. The coding of thematic analysis can be an inductive "bottom-up" method, a deductive or theoretical "top-down" approach, or a hybrid of the two, depending on the degree to which the content of the data drives the analysis and the extent to which theoretical viewpoints guide the study (Braun & Clarke, 2013). Semantic coding captures explicit meaning near to participant language, whereas latent coding focuses on a deeper, more tacit, or abstract level of understanding (Braun et al., 2019). An inductive method was used due to the need to explore participants' experiences in the EUE programme. Consequently, the focus of coding evolved while working with the data, concentrating on sections of participants' sense regarding academic, emotional and social experiences of the EUE programme, university participants' experiences transitioning into third-level education, and the impact Covid-19 had for Irish gifted students. Initially, the researcher mainly focused on noting semantic codes such as 'boredom of school'; the further they advanced, they began to observe and assign more latent codes, such as 'adapting to the new normal'. After meticulously and properly coding each interview, similar codes were consolidated into single codes. A final list of about 400 codes was obtained for the following research phase.

3.9.3 Phase Three: Constructing Themes

When constructing the initial potential themes, the researcher followed the method given by Braun and colleagues (2019) by employing codes as key components and organising the codes into key topics on Nvivo. Through visual mapping and continual engagement with the data, a list of potential themes was developed based on this grouping of codes. These included contending themes such as 'academic experience of EUE students', 'Impact of online learning', and 'perception of school'. This method of developing prospective themes was still exploratory and inductive while working closely with the coded data and only briefly consulted potentially appropriate theoretical literature at this phase. A deeper engagement with contextually relevant literature and its deductive incorporation into the analysis was developed in the subsequent phases.

3.9.4 Phases Four & Five: Revising and Defining Themes

The approach to modifying and developing topics began with reviewing all the codes and immersing in the data again. There was a shift from semantic coding to latent, seeing the nuances in what the participants discussed about the EUE programme, their schooling, and their transition into university. In reviewing the data, the researcher recognised that some themes were nuanced and eminent to be included, and others were either removed or merged into more prominent themes; for example, all data discussing participants' experiences of school were merged into two subthemes 'important social experience' and 'steppingstone to true interests'. It was also noted that some previous themes were too big and needed to be broken into more minor sub-themes to encompass what was being discussed. For example, 'Individual impact of EUE on students' was a big theme which was more suitable to break up into four subthemes 'fostering self-discovery', 'belonging', 'finding drive', and 'balancing act'. Table 3.2 below contains the themes and subthemes at this stage.#

Table 3.2 Phase 5 Final Themes and Subthemes

Theme	Subtheme
1. Love of Learning	A: Excitement for university
	B: Freedom of learning
	C: Gratification of accelerated material
	D: Instructors supporting students
2. Adapting to a new normal: Online learning	A: Comfort of home
	B: Lights, camera off, action
	C: Online community
3. Personal Growth	A: Fostering self-discovery
	B: Belonging
	C: Finding drive
	D: Balancing act
4. School: Steppingstone to True Interests	
5. Making the most of it: Students transition to university	

3.9.5 Phase Six: Writing the Report

As the researcher wrote the early draft of the analysis, a more nuanced understanding of which themes and subthemes fit with the overall analysis was recognised. Braun and Clarke (2006) characterise TA as an active creation of information by the researcher since themes are neither found nor a pre-existing form of knowledge that will "emerge," but rather patterns that a researcher discovers via their viewpoint on the data. The researcher's social environment, experiences, and theoretical stance informed the theme analysis.

3.10 Conclusion

This chapter presents the methodology and research strategy used in this study, the relevant literature and the justifications for the choices made. This chapter aims to lay a solid foundation for the study so that the reader may proceed to the following chapter, which presents the research findings.

Chapter 4: Quantitative Findings

4.1 Introduction

The findings of this chapter present the quantitative results of the study. 59 participants in this study were placed into one of the three cohort groups. 40 students enrolled in the EUE programme were placed into the *current* student cohort. 9 former students of the EUE programme still attended secondary education and were placed into the *past* student cohort. Finally, 10 university students who participated in the EUE programme were placed into the *university* student cohort. The quantitative data was derived from five standardised psychological tests:

- Student Adaptation to College Questionnaire (SACQ) (Baker & Siryk, 1984)
- The Rosenberg Self-Esteem Scale (Rosenberg, 1965)
- The Satisfaction with Life Scale (SWLS) (Diener et al., 1985)
- General Self-Efficacy Scale (Schwarzer, 1992)
- The Self-Regulation Questionnaire (SRQ) (Brown et al., 1999)
- Distance Education Learning Environments Survey (DELES) (Walker & Fraser, 2005)
- Depression, Anxiety and Stress Scale - 21 (DASS-21) (Lovibond & Lovibond, 1995)

All the scales were administered to all participants in week 8 of the second semester of the EUE programme. A table of the descriptive statistics for these measures may be found in Appendix G. The full-scale and subscale scores for each test are presented, followed by preliminary conclusions. All the quantitative scales apart from the Depression subscale in DASS-21 and the Instructor Support subscale in the DELES were not significant. The chapter concludes with a conclusion of the overall results.

4.2 Student Adaptation to College Questionnaire

The Student Adaptation to College Questionnaire by Baker and Siryk (1984) examines adjustment to university. It comprises a Full-Scale Self-Concept and four subscales: Academic Adjustment, Social Adjustment, Personal-Emotional Adjustment

and Attachment. Considering the composition of SACQ, it seemed reasonable to compare the current Early University Entrance students and the first-year university students. For this reason, the SACQ was administered only to current EUE students (n = 37) and first-year university students (n = 10). Current students left Three SACQs incomplete and excluded from the data analysis.

The Kruskal-Wallis test was used to compare the medians of each group on each of the subscales. This test sets out the null hypothesis (Ho) as: $k_{current} = k_{past} = k_{university}$, i.e., the four medians are the same. The alternative hypothesis (Ha) says a difference exists between, $k_{current} \neq k_{past} \neq k_{university}$. The null hypothesis can be rejected if the p-value is less than α (0.05). The results of the Kruskal-Wallis test are given in Table 4.1; no significant results were indicated.

Table 4.1 Kruskal-Wallis Results of the SACQ

Subscale	**Kruskal-Wallis H**	**p-value**
Full-Scale Self- Concept	.055	.815
Academic Adjustment	.011	.917
Social Adjustment	.017	.897
Personal Emotional Adjustment	.512	.474
Attachment	1.691	.193

† - statistically significant 2-tailed test

4.3 Rosenberg Self-Esteem Scale

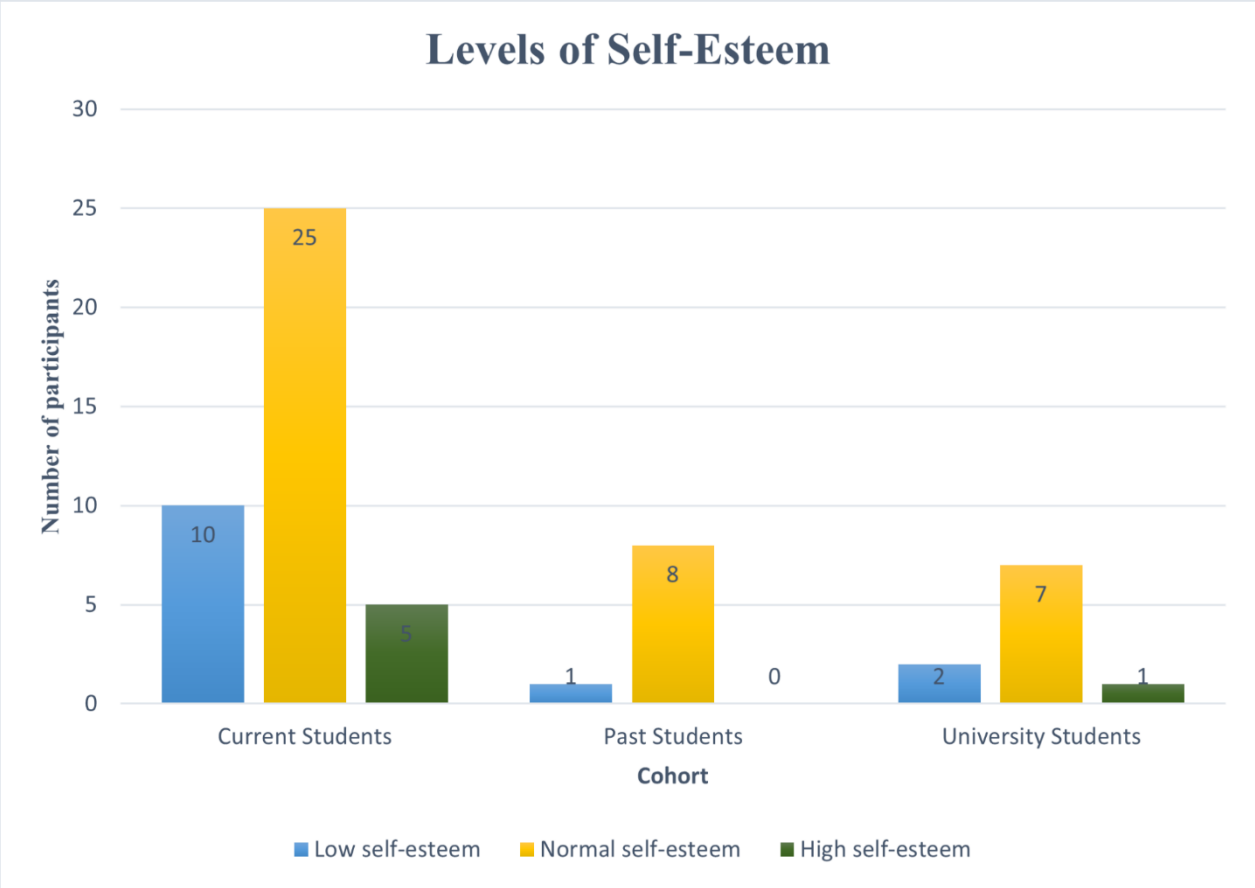
The Rosenberg Self-Esteem Scale (RSES) (Rosenberg, 1965) measures global self-esteem. It yields a total score for self-esteem; the higher the score, the greater the individual's self-esteem. Cronbach's alpha indicated that the overall scale's internal consistency was acceptable (Taber, 2018) (α=.87).

A Kruskal-Wallis test was conducted to determine whether there is a significant difference in self-esteem among the current, past, and university student cohorts. No statistically significant difference was found in the self-esteem level across the three cohorts, $H(2) = 2.164$, $p = .339$.

Although the mean score is the primary indication in most of the research employing the RSES, the RSES provides three degrees of results: low, medium, and high. In practice, Rosenberg (1965), beginning with the initial administration of the scale, employed self-esteem scores as comparative markers between groups of respondents. By the conventional method of interpreting the results of the RSES, the global score, that is, the total score after adding the points relating to all the items in the scale (in a range of 0 to 30 points in the present study), directs the researcher to three possible levels of self-esteem: low level (0-14), normal level (15-25), and high level (26-30).

In Figure 4.1 The results of the three cohort groups and the level of self-esteem can be seen below.

Figure 4.1 Levels of Self-Esteem from RSES data across three cohorts



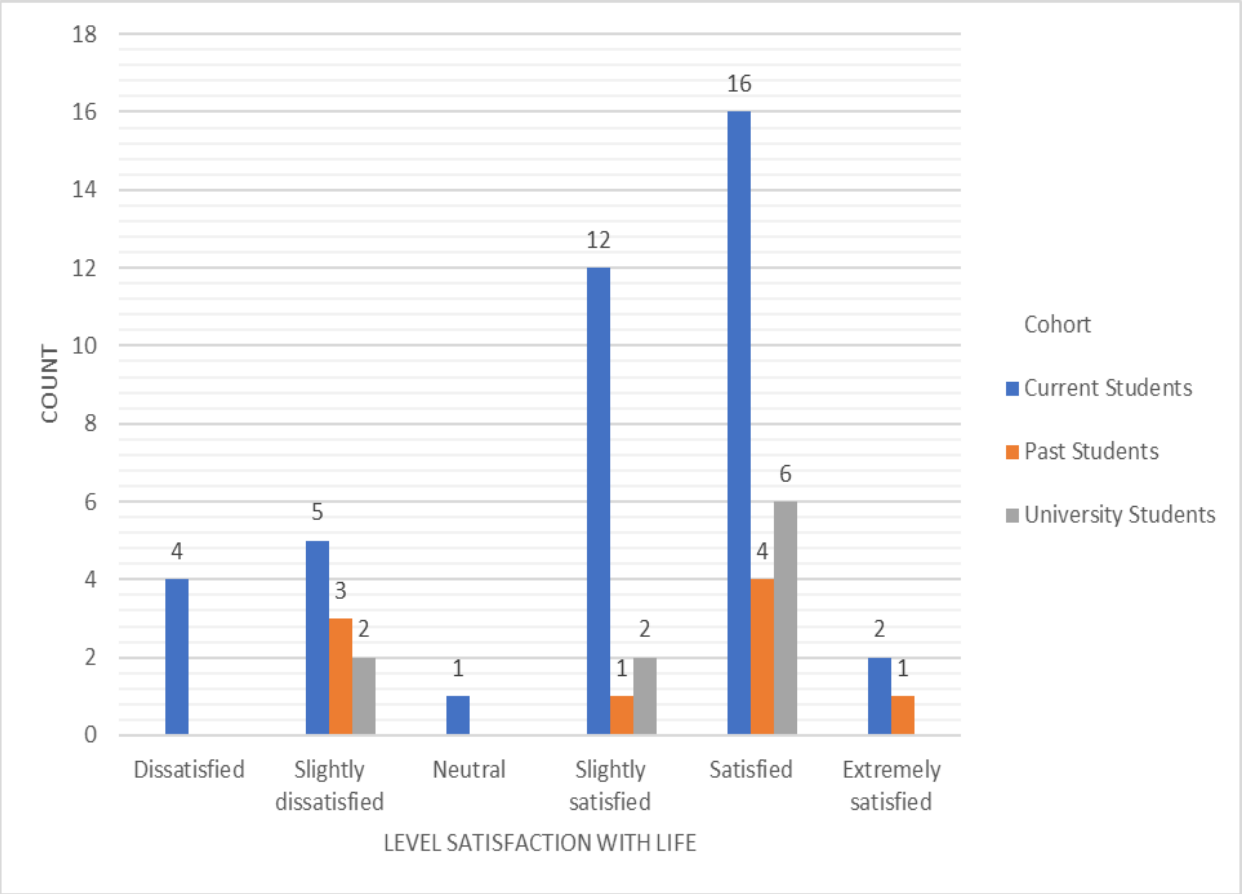
A Kruskal-Wallis test showed again that there was no significant difference in the levels of self-esteem between the three cohorts, $H(2) = .039$, $p = .981$.

4.4 Satisfaction with Life Scale

The Satisfaction with Life scale (Diener et al., 1985) measured participants' judgement of their contentment with life. Transitioning from secondary school to higher education can be a life-altering experience for individuals facing new academic, social, and emotional challenges. For participants in the current study, dealing with lockdowns and online learning while settling into a new environment was challenging. Cronbach's alpha indicated that the overall scale's internal consistency was acceptable (Taber, 2018) (α=.80).

A Kruskal-Wallis test was conducted to determine whether there is a significant difference in satisfaction with life among the current, past, and university student cohorts. No statistically significant difference was found in the level of life satisfaction across the three cohorts, $H(2) = .482$, $p = .786$. The overall results of the Satisfaction with Life scale can be seen in Figure 4.2 below.

Figure 4.2 Satisfaction with Life Data across three cohorts

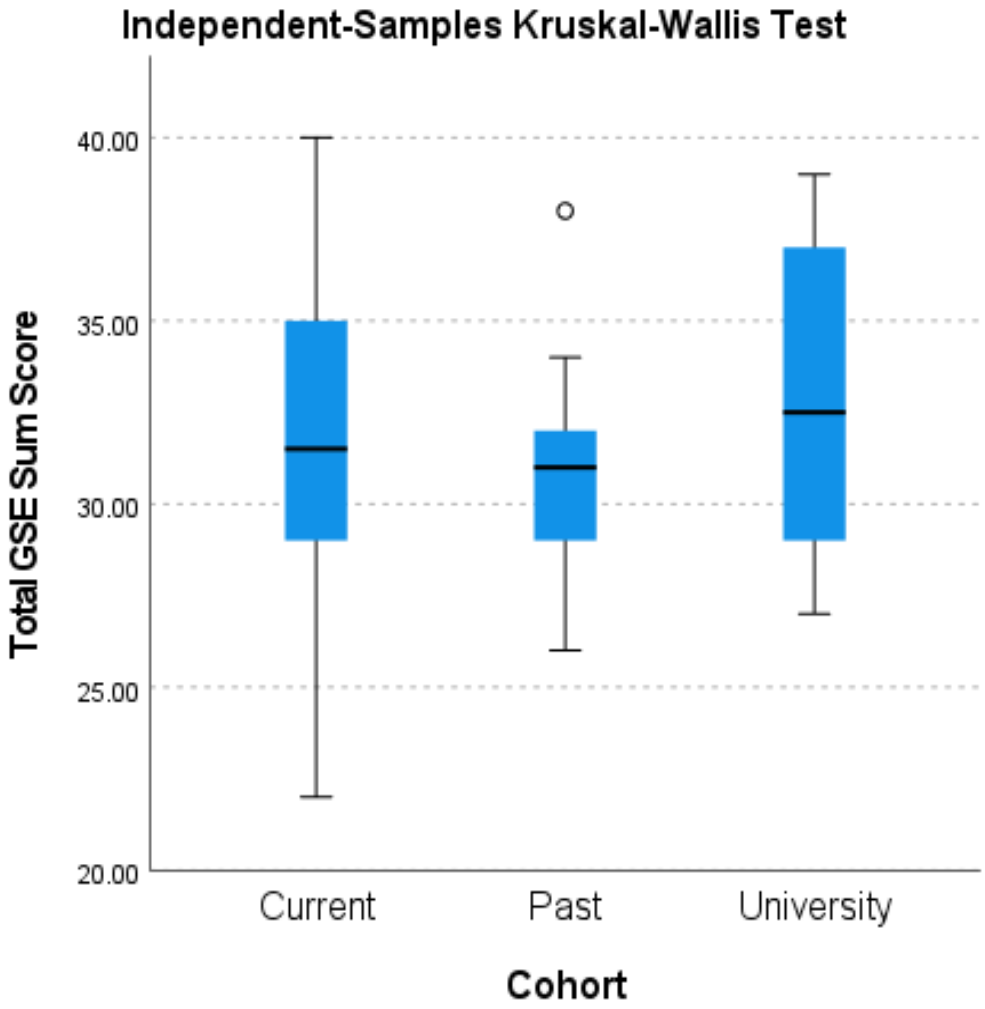


4.5 General Self-Efficacy Scale

The General Self-Efficacy Scale (GSE) (Schwarzer, 1995) was used to measure participants' self-efficacy and, in turn, their effectiveness in dealing with challenging situations. In the context of this study, how they coped with adjusting to either the EUE programme or transitioning into university, based on what cohort they belong to. Positive correlations have been shown between the GSE and outcomes such as attention management, healthy behaviours, positive well-being, and coping methods. It was discovered to have a negative relationship with perceived stress (Kusurkar, 2013). Participants' scores range from 10-40, with a higher score indicating greater self-efficacy. Cronbach's alpha indicated that the overall scale's internal consistency was acceptable (Taber, 2018) (α=.83).

A Kruskal-Wallis test was conducted to determine whether there is a significant difference in general self-efficacy among the current, past, and university student cohorts. No statistically significant difference was found in the self-efficacy level across the three cohorts, $H(2) = 1.212$, $p = .786$. Overall results of the GSE scale can be seen in Figure 4.3 below.

Figure 4.3 General Self-Efficacy Data across three cohorts



4.6 Self-Regulation Questionnaire

The Self-Regulation Questionnaire (SRQ) (Brown et al., 1999) consists of 63 items that measure the seven aspects of self-regulation as described by Miller and Brown (1991):

1. Receiving relevant information
2. Evaluating the information and comparing it to norms
3. Triggering change
4. Searching for options
5. Formulating a plan
6. Implementing the plan
7. Assessing the plan's effectiveness (which recycles to steps 1 and 2)

The scales were logically generated and had nine items each; the authors suggest using the total sum score to measure self-regulation abilities and not using subscales as an interpretation. The authors recommend the following ranges for interpreting SRQ total scores with the 63-item scale: > 239 High (intact) self-regulation capacity (top quartile), 214-238 Intermediate (moderate) self-regulation capacity (middle quartiles), and < 213 Low (impaired) self-regulation capacity (bottom quartile). For the current study, Cronbach's alpha indicated that internal consistency was acceptable (Taber, 2018) for the overall scale (α=.85).

A Kruskal-Wallis test was conducted to determine whether there is a significant difference in self-regulation among the current, past, and university student cohorts. No statistically significant difference was found in the self-regulation level across the three cohorts, $H(2) = .767$, $p = .682$. Overall results of the SRQ scale can be seen in Figure 4.5 below.

Figure 4.4 Self-Regulation Questionnaire Data across three cohorts

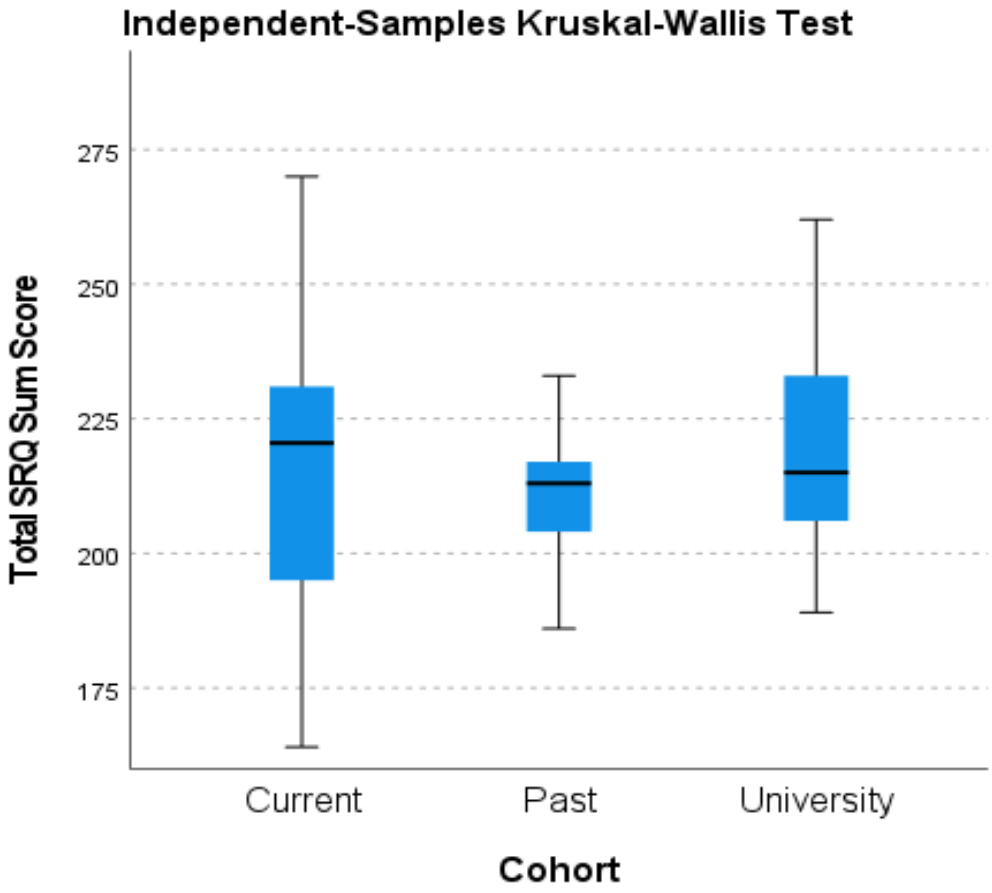
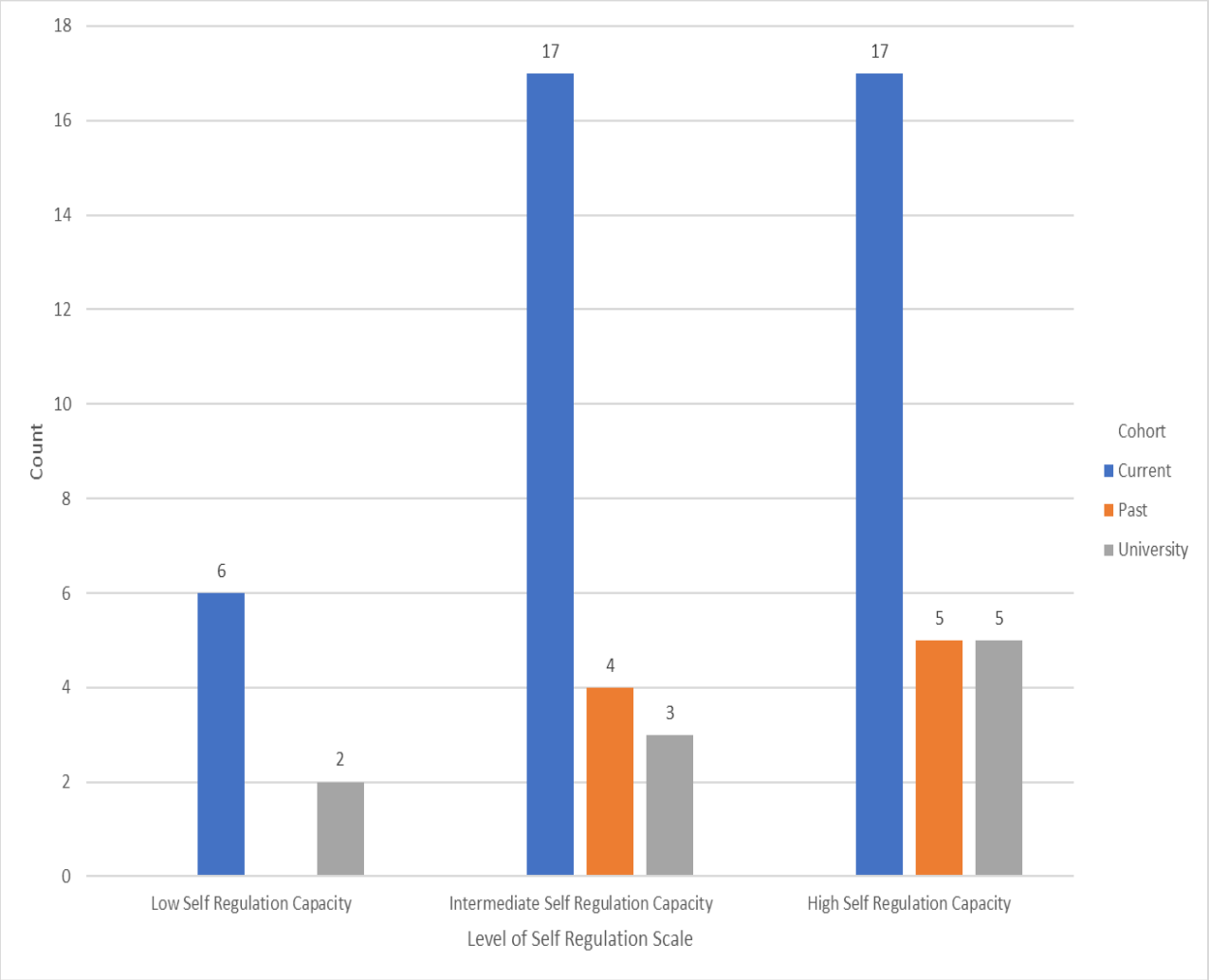


Figure 4.5 Level of Self-Regulation Questionnaire Data across three cohorts



4.7 Distance Education Learning Environments Survey

The Distance Education Learning Environments Survey (DELES) (Walker & Fraser, 2005) was used to investigate the participants' online learning experiences during the COVID-19 pandemic. The DELES consists of 42 questions, which are evaluated on seven subscales. By the manual, scoring involves calculating a mean score per item, followed by a mean score by scale. DELES scale scores are not meant to be combined to

create a single score (Walker & Fraser, 2005). Cronbach's alpha (Cronbach, 1951) was used to test for the internal consistency of the subscale scores (Table 4.2)

Table 4.2 Cronbach's α for the Distance Education Learning Environments Survey

Subscale	**# Items**	**α**	**(Walker, 2003)**
Instructor Support	8	.84	.87
Student Interaction & Collaboration	6	.77	.94
Personal Relevance	7	.86	.92
Authentic Learning	5	.80	.89
Active Learning	3	.79	.75
Student Autonomy	5	.79	.79
Enjoyment	8	.90	.95

The coefficients for these samples range from acceptable to excellent and compare well to those Walker (2003) reported. A Kruskal-Wallis test was conducted to determine whether there is a significant difference in any of the seven subscales among the current, past, and university student cohorts. The overall results of the DELES scales can be seen in Table 4.3 below.

Table 4.3 Kruskal-Wallis Results on DELES Data

Subscale	Cohort	N	Mean Rank	Kruskal-Wallis H	p-value
Instructor Support	Current Students	4	34.96	13.434	**.001†**
	Past Students	9	26.72		
	Uni Students	1	13.10		
Student Int & Collab	Current Students	4	30.55	2.114	.347
	Past Students	9	34.67		
	Uni Students	1	23.60		
Personal Relevance	Current Students	4	29.90	.058	.972
	Past Students	9	31.17		
	Uni Students	1	29.35		
Authentic Learning	Current Students	4	29.53	.857	.651
	Past Students	9	27.39		
	Uni Students	1	34.25		
Active Learning	Current Students	4	30.64	.241	.887
	Past Students	9	27.61		
	Uni Students	1	29.60		
Student Autonomy	Current Students	4	31.19	2.201	.333
	Past Students	9	22.28		
	Uni Students	1	32.20		
Enjoyment	Current Students	4	32.33	4.706	.095
	Past Students	9	31.56		
	Uni Students	1	19.30		

† - statistically significant 2-tailed test

A statistically significant difference was only found in instructor support across the three cohorts, $H(2) = 13.434$, $p = .001$. A pairwise post-hoc Dunn test with Bonferroni adjustments observed a significant result for instructor support in current and university students ($p = .001$). The overall results of the pairwise post-hoc Dunn test can be seen in Table 4.4 below.

Table 4.4 Post-Hoc Dunn test for Instructor Support in DELES

Pairwise Comparisons of Cohort

Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.	Adj. Sig.[a]
University-Past	13.622	7.867	1.732	.083	.250
University-Current	21.863	6.053	3.612	<.001	**.001†**
Past-Current	8.240	6.316	1.305	.192	.576

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.
Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

a. Significance values have been adjusted by the Bonferroni correction for multiple tests.
b. † - statistically significant 2-tailed test

4.8 Depression, Anxiety, and Stress Scale - 21 (DASS-21)

The DASS-21 scale was used to assess participants' levels of depression, anxiety, and stress. During students' university education, they can face academic and non-academic pressures, which unknowingly contribute to the deterioration of their mental health and may negatively impact their quality of life. Family-related concerns, economic struggles, difficulties adjusting to the university atmosphere, assignments, and tests are among students' most common obstacles (Talwar et al., 2016). The DASS 21, which comprises three subscales (DASS-D, DASS-A, DASS-S) with seven items each, was created to assess concurrently the constructs of depression, anxiety, and stress. According to the author's manual, all questionnaires submitted were determined to be valid.

Cronbach's alpha (Cronbach, 1951) was utilised to examine the internal consistency of the whole scale and subscale scores. An alpha coefficient between 0.70 and 0.80 is acceptable, and less than 0.5 is not acceptable (Taber, 2018). The overall

Cronbach's alpha for DASS-21 was 0.87. The Cronbach's alpha for the DASS-D subscale, SASS-A subscale, and DASS-S subscale were 0.86, 0.62, and 0.75, respectively. Overall, the internal reliability of the scale is regarded as acceptable.

Nonparametric statistics were employed to analyse the DASS-21 because of the small number of students in the total population. A Kruskal-Wallis test determines if there are any significant differences between two or more groups and was used to analyse the data of the three cohorts and their responses to the DASS-21 questionnaire. A Kruskal-Wallis test was conducted to determine whether there is a significant difference in depression, anxiety, and stress among the current, past, and university student cohorts. The results of the test are found in Table 4.5.

Table 4.5 Kruskal-Wallis Results of DASS-21 scores

	Level of Depression	Level of Anxiety	Level of Stress
Kruskal-Wallis H	6.615	.653	4.809
Df	2	2	2
Asymp. Sig.	**.037**†	.721	.090

a. Kruskal Wallis Test

b. Grouping Variable: Cohort

†Statistically significant 2-tailed test

The DASS-D subscale assesses dysphoria, hopelessness, devaluation of life, self-deprecation, lack of interest/involvement, anhedonia, and inertia. This subscale was statistically significant, and a Dunn's post hoc test was conducted to find where the difference was between the three cohort groups. The results of the test are found in Table 4.6.

Table 4.6 Dunn's Post Hoc Pairwise Comparisons of Cohort

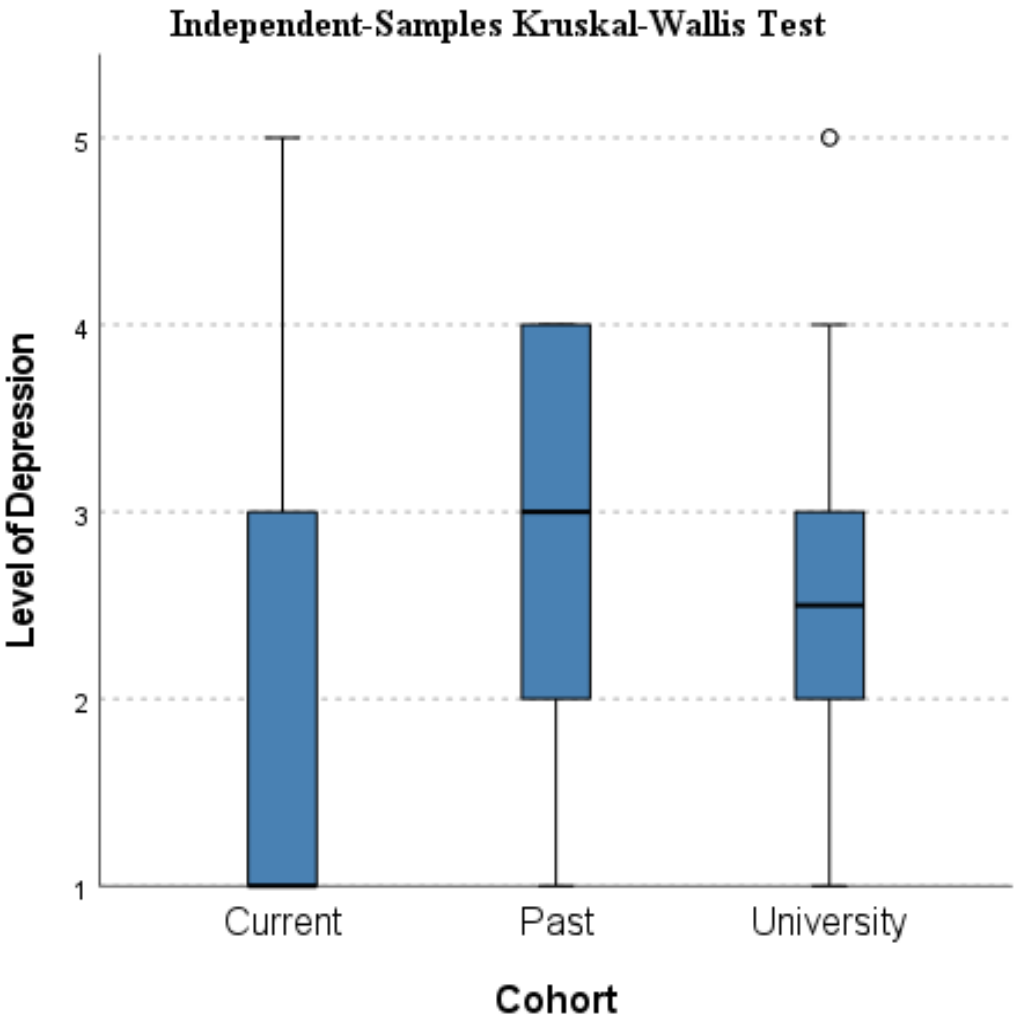
Sample 1-Sample 2	Test Statistic	Std. Error	Std. Test Statistic	Sig.
Current-University	-9.912	5.779	-1.715	.086
Current-Past	-13.324	6.030	-2.210	**.027**†
University-Past	3.411	7.510	.454	.650

Each row tests the null hypothesis that the Sample 1 and Sample 2 distributions are the same.

†Asymptotic significances (2-sided tests) are displayed. The significance level is .050.

Following Dunn's post hoc test, a statistically significant difference in the level of depression was found between the current students and the past students. The past students reported a higher level of depression than current students.

Figure 4.6 Level of Depression across the three cohorts from DASS-21 data



4.9 Conclusion

The study's quantitative findings are presented in this chapter. The quantitative data concluded that past students reported higher levels of depression than current participants. Current students in the EUE programme reported higher levels of instructor support than first-year university students. No other statistical significance was found across the three cohorts in the other quantitative scales. The next chapter will explore the qualitative findings, giving a more in-depth look at the participants' experience of the EUE programme.

Chapter 5: Qualitative Findings

5.1 Introduction

This section provides a case study evaluation of the participant's experience of the Early University Entrance programme. This meant viewing their insights through various lenses, including 40 *current* students, 9 *past* students in secondary school, and 10 students in their first year of university. Through a reflexive thematic analysis, five key themes were identified: Love of Learning explored the passion for learning throughout their participation in the programme; Adapting to Online Learning explored their perceptions of online learning academically and socially; Personal Growth examined individual growth and self-fulfilment from participation; and School: Steppingstone to True Interests, explored their perceptions of secondary school with a majority reporting feelings of boredom and not being adequately challenged. The final theme Making the Most of It: Students Transition to University, examined how the *university* cohort perceived their experience entering first year of university.

5.2 Love of Learning

As the EUE programme is primarily an academic dual enrolment programme, it was anticipated that student experiences of the programme's academic component would feature prominently in the data. Similar to Ledwith's (2013) study, it was found that overall, most students found an intellectual fit between their abilities and the academic level of the university modules. This 'fit' is often called *optimal match* (Robinson & Robinson, 1982) and will be examined throughout the four subthemes: Excitement for University, Freedom of Learning, Gratification of Accelerated Material, and Instructors Supporting Students.

5.2.1 Excitement for University

Students expressed the EUE programme's impact on their feelings towards the university. All aspired to go to university but now knew what to expect, further fuelling excitement and, for some, relieving any worries about what the academic work would entail.

> "I believe that my feelings about university are a lot more relaxed. Being able to take part in the CTYI and EUE programs has familiarised me with the flow of typical university life, making it seem less foreign and scary. Before the programme, I was worried that I may not be suited for the rigour that is expected in university, however after the opportunity to take part in programs that give a

> taster of university life, I know that university life is something that I am more than capable of succeeding in." (Ppt 19, Current Student, Questionnaire)

The EUE programme allowed students to delve into their subject interests, and for some, this reinforced their excitement to continue in this field in university.

> "Since attending the EUE programme, I have realised my passion for science and have realised it is something I want to pursue in university." (Ppt 1, Current Student, Questionnaire)

> "I wanted to experience a biology course to see if I am still interested in med school after, and it is proved that I am, and I enjoyed it, like thoroughly enjoyed it." (Ppt 20, Current Student, Interview)

For other students, the EUE programme helped them to see that the subject they thought they would like to do at university is not something they would like to pursue in higher education as they once thought. The programme allowed students to delve deeper into subject areas; for some, they learned it was not what they envisioned.

> "Normally, I would be big into maths, but I realised I do not like that. It would have been something I considered before, but I loved the coding side and watched YouTube videos to keep up with it. So, I liked that part, but maybe not, uh, engineering like I once thought." (Ppt 27, Current Student, Interview)

> "Yeah, I just wanted to see what psychology would be like in college and that kind of thing, and I found it out. It was hard, I have to say, like even all the science." (Ppt 59, University Student, Interview)

> "Doing this course fermented in my head that I *do not* want to pursue business in college, and I would prefer science." (Ppt 46, Past Student, Questionnaire)

The EUE programme gave students a taste of not only the university's academic life but also showed a limited social perspective and helped dispel any fears students previously held.

> "I am not half as nervous as I would be had I not attended the EUE programme as it took the majority of the stress out of it from both the academic and the social side." (Ppt 1, Current Student, Questionnaire)

> "It did bring me out of my comfort zone, and my eyes were opened to the world of education outside of school for third level." (Ppt 41, Past Student, Interview)

> "I think on one end going into college now even like preparing for group work, meeting new people, new friends, everything yeah definitely boosted." (Ppt 49, Past Student, Interview)

Students discussed their excitement to enter a more suitable academic and autonomous learning environment than they experienced in secondary school.

> "For me, it was the element of challenge you get that mainstream lacked. The change of structure and paradigms of university life gave a buzz to the overall experience, especially in applying your learnings through academic writing, exams and papers. It is the timely maturation, I suppose, from secondary. I think about it constantly, in a dream-like state, envisioning freedom in education. Studying something I enjoy fills me with this premature ardent embrace of university with open arms." (Ppt 49, Past Student, Questionnaire)

> "I am excited about university. I cannot wait to focus more on what I want to study and learn more in-depth. I also love doing projects which, as far as I know, are a lot more frequent in university than in secondary school. I also have heard that university is much more discussion-based (depending on the subject), which I enjoy and feel is lacking in secondary school. I cannot wait for the social aspect and think it is a great place to meet like-minded people." (Ppt 33, Current Student, Questionnaire)

5.2.2 Freedom of Learning

Participants discussed the enjoyment of controlling their learning in the EUE programme. This was a stark change from the *handholding* they experienced in secondary school. If students did not comprehend the topic covered the first time, it was their responsibility to figure it out. For many of the students, they preferred the independent style of EUE and were able to keep up with the workload. Students who needed time after class to revise or review challenging topics did so, showing dedication to their studies. Many students reflected on how the lecture format fostered self-directed learning skills. This came with great responsibility, but it was a welcome change. They enjoyed the opportunity to study at their own pace and in their own time, which made the learning experience more personally gratifying.

> "I liked how EUE gave us much independent work because normally, with the school, it is teachers who check up on your work and tell you what to change before handing it in, but with EUE, it is all independently done, and we have to asses it ourselves and think if it is good enough/if we need to change anything and I am pretty sure that is what it will be like when we are given assignments in university too" (Ppt 31, Current Student, Questionnaire)

> "We have much more responsibility to take accurate notes and ensure we understand the information (e.g. by doing some extra research ourselves). The work is also more difficult and detailed than secondary school." (Ppt 15, Current Student, Questionnaire)

> "I enjoyed the freedom that university has that secondary school does not have. We had many more discussions like the lessons were interactive compared to secondary school. EUE was much more directive, and we were encouraged to discuss things together, ask many questions, and interact with the teacher and the lesson, so I enjoyed that. I had more control of what I was studying and doing, giving me much more freedom." (Ppt 19, Current Student, Interview)

> "I also found it nice to be in control of how I study, not having everything planned out by someone else." (Ppt 15, Current Student, Questionnaire)

> "I liked the freedom and responsibility we were given; our learning was very much self-directed." (Ppt 31, Current Student, Questionnaire)

5.2.3 Gratification of Accelerated Material

The EUE programme allows students to study first-year university modules, but some students were concerned about meeting the rigorous requirements of university at the very start of the programme. Although these students are competent academically, they lack confidence in a new educational landscape. This may be due to a feeling of imposter syndrome where previously they did well academically with little effort in school and realised EUE will require an increase of effort and challenge their academic self-concept.

> "Before taking part, I was fearful that the course material would be too difficult for me to comprehend or would be too advanced." (Ppt 1, Current Student, Questionnaire)

> "Going into the EUE, I did not know what to expect as I had never done anything like this before. I thought it would all be extremely challenging." (Ppt 8, Current Student, Questionnaire)

> "I was fearful that I am not smart enough to be where I am, that I got here by some sort of fluke." (Ppt 26, Current Student, Questionnaire)

However, they all seemed to quickly acclimate to the level of academic demand expected of them. They flourished knowing they could engage and complete this higher-level work at this young age. The EUE programme fosters students' confidence building, helping them to realise that they "are capable of succeeding". The accelerated coursework and academic challenges appear to be stimulating and fulfilling for them.

> "I think I did pretty well. I had my homework probably every week, and we did the weekly tutorials. It was different, much more information than I have ever been given in one class, but I enjoyed it." (Ppt 20, Current Student, Interview)

> "I enjoyed how difficult it was. This was the first time that I was just absolutely pushed, and I could not even do it perfectly; it was tough, and I liked that; it humbled me a lot." (Ppt 27, Current Student, Interview)

> "I found it quite good academically like it was, it was not overly hard like it was stimulating, but it did not just go over my head like it was at a level where I could understand it and actually work at it and do well at it." (Ppt 53, University Student, Interview)

> "I loved attempting the assignments and the exams and getting feedback and constructive criticism. I am thrilled, I did much better than I could have imagined, and it gave me a confidence boost for future endeavours" (Ppt 24, Current Student, Questionnaire)

5.2.4 Instructors Supporting Students

Students discussed the "friendly and supportive environment" that the instructors on the course fostered. Going into a subject that students were interested in and learning from someone "knowledgeable and passionate" in the area fuelled their desire to learn. They described a relaxing and fun environment, allowing many discussions and opinions to be shared.

> "The lecturers are knowledgeable, but we can have fun with them too. All the staff are friendly and supportive; they care and want to help if you have any problems. The teachers [instructors] are super enthusiastic about the subjects and know how to make the learning interactive, which makes us learn in a fun way." (Ppt 4, Current Student, Questionnaire)

> "Oh, they were great. I enjoyed the way that they kind of like spoke about subjects because I feel like all of them were passionate about them, and that made the lesson more fun; they always found ways to kind of like put little games in there or like allow much room for discussion, so it honestly made my learning like ten times better. I enjoyed it." (Ppt 19, Current Student, Interview)

> "Yeah, they are nice, seemed intelligent as well, and they were not like only one side is the right side; they accepted a lot of different opinions and stuff and let people talk it out. They also let people express their opinions, which I thought was very cool and that it was very, it felt very open, but the teaching was done very well, I thought". (Ppt 29, Current Student, Interview)

They found the instructors engaging and understanding and helped support their academic, emotional, and social learning. It was a welcomed change from their experience in mainstream education in secondary school.

> "Emotionally, I was calm throughout. It did not stress me out because I felt supported by the class and my teachers [instructors]. I thought they were

supportive, really engaging. They made a great effort to make sure everybody was involved in everything, and we got the most out of the course. They were always on task, and it was just a positive atmosphere, and they were engaging and interesting to listen to." (Ppt 41, Past Student, Interview)

"They make the information interesting and fun while also teaching us things, and they are always approachable and everything as well. Suppose we had problems with deadlines or anything like that. It was just very nice overall." (Ppt 43, Past Student, Interview)

"My teachers were absolute lifesavers here, accommodating at explaining and adjusting for anything I needed. My teachers were good at recommending extra reading to further our understanding of the work. Physics did not lend itself to as many extra reading opportunities as perhaps law would have, but I read loads of fascinating articles about new research areas." (Ppt 31, Current Student, Questionnaire)

5.3 Adapting to a new normal: Online Learning

As this study includes students from the 2020-21 years, during which time the world was amid a global pandemic, online teaching and learning was a feature of EUE. All participants in this study had to adapt to online learning, whether in the EUE programme, secondary school, or university. For some participants, it was easier to adapt to this 'new normal'. Some students felt the benefits outweighed the difficulties that came with online learning. For others, they did not enjoy online learning due to distractions, technology issues and how easy it was to switch off and disengage behind a screen. This will be explored in the three subthemes: *Comfort of Home*, *Lights, Camera Off, Action*, and *Online Community*.

5.3.1 Comfort of Home

Students discussed that one of the significant benefits of online learning was staying in their homes; this made them feel at ease and much more comfortable. They felt the pressure was taken off them since they did not have to sit in a classroom and interact with other students. They felt 'safe' within their own home and could enjoy the comfort of their own space. Some students found it easier to engage and ask questions in class without the social pressure of other students around them.

"I think because I am genuinely interested in the subject, I stay interested and not distracted during class. I liked it; I liked working online. I find that a small quantity of the pressure is taken off sometimes. You only have to look presentable from the

> waist up. I found it quite enjoyable. Sometimes, it is just having the social pressure taken off for me; I felt pretty good." (Ppt 20, Current Student, Interview)

> "I enjoyed it. I love being able to sit in my room and be comfortable, and then you can be confident and, if I want, go for a nap during your lunch. It is brilliant. It is easy to get to know people when you are comfortable and everyone's kind of relaxed in the environment that they like. Moreover, worst-case scenario, you turn off your camera, and it is like, you do not exist, you know." (Ppt 27, Current Student, Interview)

Some students noted that the social anxiety was removed by being able to attend classes online, and they felt much more comfortable and had more freedom in their learning.

> "It was appealing to me because we were not meeting face to face; I felt some of the tension I sometimes have meeting other people was not there." (Ppt 20, Current Student, Questionnaire)

> The classes were very engaging, even over Zoom; I felt very comfortable while asking questions and talking with the other students (Ppt 45, Past Student, Questionnaire)

Some university students discussed how they enjoyed online learning; all their course material was available at any time that suited their schedules. They could go back and watch recordings of lectures, something that previously would not have been available. It made some students feel more autonomous in their learning.

> "I loved that everything is recorded, and you can look back on it. I loved that you could see the videos, so I think making the best of it; I enjoyed it…I think it gives me much freedom in studying, and I can study how I want to." (Ppt 52, University Student, Interview)

> "I would say it is, for me, it is not as bad as people make it out to be academically like; for me, I do not mind doing it online the fact that all the course material is a couple of clicks away and I can use it for references, and if I miss a lecture, I am not falling behind I can catch up and watch the recording. (Ppt 53, University Student, Interview"

Due to child protection laws, it is essential to note that the EUE online classes were not recorded for students.

5.3.2 Lights, Camera off, Action

Most participants discussed how hard it felt to connect with people online. This was due to numerous factors, including students turning off their microphones and camera. With no visible image on the screen, it was straightforward to not engage with others in the class and to become distracted using their phones or even playing with their game console. Participants highlighted how if classes were held in person, it would be much more difficult to disengage as some did online. Interestingly the participants highlighted that small interactions that may happen in a regular classroom setting, such as tapping someone on the shoulder to ask them a question were not possible online. Perhaps this lack of small but meaningful interactions also played a part in disengagement in the online classroom environment.

> "Socially online, it was tough to connect with people. Cause I feel like a lot of the time it is like if people did not want to talk, they would turn off their camera or like their cameras would already be off and like the mute would be on, so it is kind of like sometimes I would unmute myself, and I would be like hello and no response. I feel like it is easier to disconnect from people. Whereas if you are in university, you can walk up to someone and talk to them, you cannot do that when their camera and microphones are off." (Current Student, Ppt 19, Interview)

> "Uh, it was difficult to meet people. Like during the class, you could not be there whispering friend or anything". (Ppt 27, Current Student, Interview|)

> "Online learning allows for group participation to be a lot more optional; many would not engage in group activities or chats." (Ppt 19, Current Student, Questionnaire)

Many students mentioned the distractions of online learning, such as being on their phones, easily walking away from their computers and noises from being in their family home.

> "If you were kind of in the place [university], you would not want to be rude and stay there and listen to that kind of thing. You would not just pick up your phone, but with the cameras off, it is easier". (Ppt 59, University Student, Interview)
> "Studying from home, I was always tempted to walk away from the computer, and I found it difficult to sit at my desk for such long hours at a time." (Ppt 17, Current Student, Questionnaire)

> "The long hours of being on the call. I feel like if it [EUE] was in person, it would have been better, but being in my room from 10-4 was quite boring sometimes, and I found it hard to concentrate, especially with stuff happening / noise in the house" (Ppt 34, Current Student, Questionnaire)

5.3.3 Online Community

Although many students discussed the ease at which individuals could disengage in the programme by turning off their cameras and microphone, many still could forge friendships and enjoy the social aspect of meeting like-minded peers with similar interests in their online classrooms. Every Wednesday evening over the semester, EUE hosted online social events over Zoom for the students to participate in, which was praised by the students who attended them.

> "The EUE social life was amazing in so many ways because the course you studied was your choice; you are in a classroom (or, in this case, zoom call) with people who are all as interested in the subject and as eager to learn as you are. From the start, you all have something in common, and everyone is very friendly with each other." (Ppt 1, Current Student, Questionnaire)

> "Fascinating dynamic…We get to discuss our different courses and schoolwork and our interests. I feel it is more diverse and accepting than secondary school social life. Everyone is equal." (Ppt 2, Current Student, Questionnaire)

> "What I loved is that most people were like-minded, and although we could not meet in person, they wanted to keep in touch online, and we all got to know one another better in group chat which made the virtual learning experience even better." (Ppt 36, Current Student, Questionnaire)

Breakout rooms appear to be the most helpful tool for students to engage with each other. They appear to have connected in their virtual space for periods without the instructor's presence. Breakout rooms were used for group work or discussions amongst smaller groups of students than in the leading online class. Some students may have found it easier to engage with fewer people and be more open to discussions and sharing their social media with students they became friendly with on a personal level. Perhaps breakout rooms and social media allowed for a virtual *tap on the shoulder* to ask for help or discuss what was going on in the class and academic material without the fear of asking for help in front of the entire class.

> "I do not know. I enjoyed it, and I liked doing the breakout rooms with people because you got that social interaction, and I enjoyed it; I was pretty happy with it. Socially it has all been good, and speaking to the EUE people was also good." (Ppt 20, Current Student, Interview)

> "The tutorial was good, I met loads of nice people, and we all have each other's snapchats and stuff now when we were doing our group presentations. So, it was good. When we had our tutorials, we were just left for about half an hour to 40 minutes in our groups, and it was great; we got our work done and met loads of nice people. Some people were not very talkative, but that was okay. No one was ever rude or anything. Everyone was lovely; everyone made friends… we had 13

> out of the 20 people that we got into Snapchat; the rest did not have Snapchat, just asking homework questions, sending each other, like, did you get this? Do you get that? See where everyone is at. It is nice and helpful to know that you are not the only one who was far behind and struggling, so it was good. They are all nice people." (Ppt 27, Current Student, Interview)

The COVID-19 pandemic has forced many students worldwide to adapt to online learning and a new way of interacting with people. While this has been a challenging transition for many, they demonstrated their adaptation, resilience, and creativity. Students have been able to continue their education and maintain social connections despite the challenges posed by the pandemic. Students had to find alternative ways to connect with their peers; many turned to social media, online discussion forums, and virtual study groups to stay connected and engaged with their coursework.

> "Yeah, no, it [online learning] was difficult, but I still met many new people, so it was good. I found it [online learning] ok yeah, definitely like breakout rooms and stuff were good and that kind of thing." (Ppt 3, Current Student, Interview)

> "The work was difficult a lot of the time but still doable. In the mornings, we did problem-solving in breakout rooms, which was helpful because we could work together to solve the problem. We had the same breakout rooms every week, so I became good friends with the people in my breakout room." (Ppt 14, Current Student, Questionnaire)

> "I found it relatively easy to interact with my class, especially in breakout rooms. Interacting in person would have been more convenient, but thankfully everyone was just as enthusiastic about socialising, and we all got on well." (Ppt 17, Current Student, Questionnaire)

During the 2020-2021 and 2021-2022 academic year of the EUE programme, it was decided to create a weekly online social evening for students. Different activities were hosted online, such as movie appreciation, quizzes, and debates, to name just a few, that students could voluntarily attend on a Wednesday evening. During a period of global shutdowns, this was a much-loved and appreciated social aspect of the programme since students could not meet on campus and interact with each other face-to-face as in previous years. Since the social evenings were voluntary, this meant students attending wanted to be there and engage with other people, which helped students form bonds and friendships online. For some, this online friendship blossomed into meeting face-to-face when

restrictions were lifted in the country, as highlighted by some students. Overall, it appears the cameras were on for the social aspects of EUE but not for the classroom.

> "There were many people they could speak to, and everyone was more engaged because it is by choice, and it is like, oh, you can choose if you want to turn on your camera. Most people did, so it was nice. It was a lot more interactive." (Ppt 19, Current Student, Interview)

> "In terms of EUE, I had a much more active social life than I expected; I attended the weekly social evenings and got to talk to loads of different people, exchanging social media and still keep in touch with them today. I also met people that I travel to see regularly during school breaks, and I consider close friends; also loved the weekly social zooms that were held as I met friends I still have to this day and see as often as I can" (Ppt 24, Current Student, Questionnaire)

> "I attended EUE during the lockdown, and it was brilliant to have a guaranteed social evening every Wednesday evening. I met many great people on these social evenings and am still in contact with many." (Ppt 31, Current Student, Questionnaire)

> "The social evenings allowed me to get to know people from other programmes and socialise with my classmates in a more informal environment. I talked to many of my classmates outside of EUE online. I became great friends with some of my class and still talk to them regularly. Taking part in some social evenings greatly helped me make friends from other courses." (Ppt 17, Current Student, Questionnaire)

5.4 Personal Growth

The EUE programme yielded both personal and academically oriented insights. It helped some discover more about themselves. The students discussed how they changed academically, emotionally, and socially during the programme. These will be discussed in the four subthemes: *Finding their Drive*, *Fostering Self Discovery*, *Belonging*, and *Balancing Act*.

5.4.1 Finding Their Drive

Students discussed how the EUE programme allowed them to excel in subjects that captivated their interests, and this fuelled their motivation not only in the programme but for their senior cycle in school and future studies. Having a glimpse of what lies ahead in their future academically made them want to push themselves even further, knowing that they can achieve well in their area of interest. It has given them a more vital self-belief, quiet confidence that they can achieve whatever they put their mind to. The

students discuss how EUE has helped them "to become more confident in their academic abilities," enabling them to "become more responsible" for their "own education and learning".

> "I feel relieved because I was stressing…I feel way more comfortable; I can do 5th year, 6th year and aim for high points now, even more so than before. It is humbling for me to put much more effort into my work and show that more effort gives you better results, you know? I know a lot more about what I can do and what I could be capable of doing." (Ppt 27, Current Student, Interview)

> "I have also become more confident about myself and what I am capable of and have realised that all I lacked was the motivation to do so, which was something I only realised from throwing myself into my work in the EUE programme." (Ppt 1, Current Student, Questionnaire)

Students have taken ownership of their learning and have relished this feeling. They are stepping away from a more teacher-driven educational landscape and into a new fresh environment which has empowered high expectations of themselves.

> "I have changed in so many positive ways since attending EUE. I have become more interested in working harder…gained a better sense of what I want to do in life. I have also gained huge interest and appreciation in my work in EUE and secondary school. The quality of work I wanted to put into my EUE assignments has transferred to my secondary school assignments, and I am reaping the benefits of it on both accounts. During the EUE programme, I realised that I am the one that must make the work more interesting by trying to challenge myself…and school as a place has skyrocketed" (Ppt 1, Current Student, Questionnaire)

> "It made me think more seriously about school and what I want to do when I am older. I am more confident in my academic abilities when the EUE course is finished because it will show me that I can handle a university-level course even though I am only in TY." (Ppt 13, Current Student, Questionnaire)

> "We had a lot more independence. We were kind of just told to sit here and pay attention. The more attention you paid, the better the teacher would not tell you to pay attention or anything. It is all up to you, and just however motivated you are, you can succeed off of that" (Ppt 27, Current Student, Interview)

Engaging in new tasks and experiences can be exciting and stressful for highly able students. They may feel unsure of what is expected and may experience pressure to excel. Students discussed that throwing themselves into EUE work was challenging, but they found a new lease of motivation in their studies. Some students mentioned the hard work and effort they put into their coursework and the rewarding feeling of *earning* their grades. This new experience for these students helped build a positive self-belief that they are capable of challenging work and gained a real sense of accomplishment.

> "The final assignment I spent hours doing, and I do not even know what level I completed it to. I am kind of nervous about getting the results back, but I did my best. It was the hardest part: lots of Googling and time sitting and scratching my forehead. Um, I think that was it. The rest of it was all nice. It is just that the challenge was challenging. It was good for me, though." (Ppt 27, Current Student, Interview)

> "The lectures were fascinating, and I found some of the work stressful because I had not done essays or presentations like that before, but I was thrilled with myself when they were completed." (Ppt 48, Past Student, Questionnaire)

> "Yeah, it was hard. I think it is the most I have probably studied for something in a while. I went in on my interest, and I feel more motivated to do what I want to do now, and now I see the level I must be at as well, which is a change." (Ppt 20, Current Student, Interview)

> "I was delighted to have gotten a First Class Honours in both subjects! I hoped to achieve high results as I worked hard at the coursework and did my best. I enjoyed the course and would recommend it to everyone who feels they would be up for it! It requires dedication and motivation, and I had to work hard, but it was worth it for all the knowledge and new skills I acquired, such as essay writing, presentation, etc." (Ppt 44, Past Student, Questionnaire)

The participants in the study discussed how they engaged in their subject interests beyond the set coursework of the EUE programme. For some, this was doing further readings such as journal articles or watching related videos online. This demonstrated their drive and motivation to delve deeper into their interest.

> "I engaged in my subject beyond set work; I studied sports science which I loved as I have a major interest in sports and injuries. I loved reading through papers on PubMed in my spare time and reading articles on things we discussed in class. The lecturers mentioned names of diseases, sports, people, etc., which I jotted down and researched after class. I also watched many YouTube videos on the physics aspect of the course, such as why a cat always lands on its feet. Having a university experience at this age made me more focused than ever on my education goals. I understood that a lot will be expected of college students and that I should learn to work hard now so that it will stand to me when I am of age to be in university." (Ppt 45, Past Student, Questionnaire)

> "It completely took over a lot of what I did in a positive sense. I was researching various sources for my investigations, and indulging in psychology was enriching. It was brilliant, from YouTube marathons on Thurstone's theory of intelligence to reading books on psychoanalysis. It broadened my perspective on what I was working towards for state exams." (Ppt 49, Past Student, Questionnaire)

> "Yes, I would visit Google Scholar to glance through different psychological research papers out of interest. Looking at case studies and watching informative content." (Ppt 19, Current Student, Questionnaire)

Some students are now enjoying the academic benefits of the EUE programme and using their transferable skills to delve deeper into their interests in school and motivate them to do well in their state examinations.

> "I have found that since completing the course, I have developed a deeper interest in law and global politics, as well as American politics, which I covered in the module. Continuing my interest in law, I started debating this year and found that many skills I learned from EUE extended to this." (Ppt 2, Current Student, Questionnaire)

> "We were allowed to participate in the Public Access to Law programme in school, so I signed up to use the knowledge and skills I had learned in EUE. I watched the news and read the occasional article about law or politics if it interested me." (Ppt 44, Past Student, Questionnaire)

> "It exceeded it [expectations]…EUE allowed me to push myself in a way that has given me a massive advantage over other students in leaving cert and probably in college" (Ppt 6, Current Student, Questionnaire)

> "I have also gained a huge interest and appreciation in my work in EUE and secondary school. The quality of work I wanted to put into my EUE assignments has transferred to my secondary school assignments, and I am reaping the benefits of it on both accounts." (Ppt 1, Current Student, Questionnaire)

> "I think it is like one of the best things I have ever taken part in, and it has done more to prepare me for my future than many things have." (Ppt 43, Past Student, Interview)

5.4.2 Fostering Self Discovery

Participants expressed how they felt the programme positively impacted their personal development, such as gaining confidence, having more responsibility, and ultimately maturing from the experience. As discussed in the previous theme, students gained confidence in their academic abilities, but being placed in a new EUE environment positively impacted their self-development. Factors that fostered this maturation included the independent nature of a university, meeting new people and engaging in academically challenging coursework that pushed many out of their comfort zone.

> "I think once you step into college, or in this case, EUE, you change from a child's mindset to a young adult. Through EUE, I have navigated who I am as a person in terms of what works for me learning-wise, what works for me organisation-wise and what works for me coping-wise." (Ppt 7, Current Student, Questionnaire)

> "Yes, I think I already see a change. I have immersed myself into the coursework, met new people and made new friends, have started to adapt to this higher standard of learning and feel I am becoming more of a well-rounded person" (Ppt 2, Current Student, Questionnaire)

> "I have learned to be more outgoing towards people with similar interests and get to know new people with totally different views about different things. Attending EUE has made me more confident since the teachers emphasise that we should speak about things we enjoy in a subject." (Ppt 5, Current Student, Questionnaire)

> "I did not even know what I wanted to get. I was excited. It was kind of an *into the unknown experience,* but even besides that, it was beyond what I could have ever expected, especially in terms of the academic, social, and emotional aspects. Even if you were to expect the academics side, it is always tough coming in, integrating into the population, and then trying to get on track with everything. I think EUE helped me mature more than anything. Lads would be given out as we go anywhere, and it is talking to the shadows. However, no, I think one end going into college now even like preparing for group work, meeting new people, new friends, everything boosted, boosted." (Ppt 49, Past Student, Interview)

Students discussed that meeting other students from all over the country with differing viewpoints was a welcomed experience. Many people might not meet people from various parts of the country until they enter university at the expected age. The students enjoyed this aspect of the experience immensely. Many students mentioned meeting many students who voiced different opinions or viewpoints. They found this quite important and opened them up to the understanding of other people, which may not happen until university. The students relished experiencing it and saw it as an important and life-altering experience.

> "When you go to something like this, you have a lot more people, you meet a lot of new people that have different viewpoints and, um, you kind of have to, you know, you learn to respect them even if you disagree, you still have to respect them, and I think that is a very, um, eye-opening experience" (Ppt 29, Current Student, Interview)

> "Yeah, it has opened my eyes; it was the first time I met with so many people from elsewhere in Ireland and outside of Ireland and being with them for so long. So, it kind of just opened my eyes a little bit, I think." (Ppt 3, Current Student, Interview)

> "Doing college-style work boosted my confidence and gave me a look into the future. I met many people from different backgrounds and perspectives than myself, which opened my mind a lot. Overall, I think the programme made me more outgoing and confident." (Ppt 24, Current Student, Questionnaire)

> "I feel like I will be much better informed as a person. My views on society might also change by the end of this as I am meeting many new people with very different viewpoints to mine." (Ppt 29, Current Student, Questionnaire)

Students reflected on gaining inner "confidence from this experience" on the EUE programme. They illustrated positive traits and behaviours that reflect their increased self-assurance and self-esteem, such as developing their "communication skills and becoming more responsible". The students exulted in standing on their own two feet, accepting this challenge, and stepping outside their comfort zone. For many of these students, EUE gives them this new opportunity did not afford them in school.

> "It brought out more my confidence, being thrown into a class of new people, but I found by the end of it I was a lot more sociable, and that made me happier as well like I felt more confidence in myself from being put into that environment. And then my confidence level after transition year just came out of my shell. I felt very good going into 5th year, so it was very good." (Ppt 41, Past Student, Interview)

> "I think so; it has made me way more comfortable with the college environment of dropping off and figuring out your way around campus. Without EUE or CTYI, it would have been a long time since you had been in a place where you did not know anyone. I feel like that helped me like get out of my bubble as a person in general. I feel like EUE helped socially and the independence. I feel like it is a good step in between from leaving cert or secondary school to the college experience." (Ppt 52, University Student, Interview)

> "I think it helps in terms of maturity and responsibility; I found it got me used to the idea of working and studying for my own sake and not just because a teacher was telling me to." (Ppt 15, Current Student, Questionnaire)

> "Yes, I believe I changed as a person; it developed me as a person and increased my maturity. No one was going to email my parents if I did not hand in work; I would just receive a lower final mark." (Ppt 20, Current Student, Questionnaire)

> "I feel being thrown into a new environment where I knew nobody helped me to develop my social skills further." (Ppt 44, Past Student, Questionnaire)

> "It brought out more my confidence being thrown into a class of new people, but I found by the end of it I was a lot more sociable, and that made me happier as well, like I felt more confidence in myself from being put into that environment." (Ppt 41, Past Student, Interview)

5.4.3 Belonging

One of the most apparent aspects of the programme is the degree to which the students got on socially and made friends. They revelled in the opportunity to meet like-minded peers where they could have lengthy "academic conversations" on subjects with similar interests and future ambitions. Some students highlighted that it was the first time they felt connected with people outside of school that they could open up about things they found truly captivating and gained a sense of happiness and belonging from their peers in the EUE programme. They felt like they *found their tribe* and could relate to their peers with a similar work and learning ethic than perhaps students in their school.

> "I have also realised that hanging out with people interested in school is just as much fun, if not more fun, than hanging out with people who are not because we encourage and push each other to the best we possibly can. My school assignments have all become a better quality of work, and my grades are the best they have ever been." (Ppt 1, Current Student, Questionnaire)

> "I loved spending time with people with interests similar to mine who are genuinely eager to learn about the course material. I enjoy spending time with people I can have 'academic' conversations with, and I think EUE was the perfect opportunity for that as it is not something I find myself able to do in school, or at least not to the same extent." (Ppt 33, Current Student, Questionnaire)

> "Being in a class with people interested in the subject and wanting to do well. My classmates are all intriguing and diverse people. The class environment is enriching and comfortable. In EUE, I feel more comfortable asking questions and being more open." (Ppt 4, Current Student, Questionnaire)

> "The EUE social life was an experience to remember. In regular school, there is a combined element of people from different academic and social levels. This is certainly beneficial to broaden a social bubble to those different from you. However, the EUE social life was exceptional since everyone there is dedicated, hardworking and clearly of a high academic standard. The group of people in EUE are relatable, which helps drive social life in the programme." (Ppt 7, Current Student, Questionnaire)

> "I found it good I liked interacting with the people because in my school particularly it is not very 'sciency'. So, no one particularly likes to talk about that. I am interested in biology, and I like talking about biology with people, and I cannot do that in my social group in school and outside school. I found DCU was where I could talk about it like we discussed different medical books we had read and, as weird as it sounds, different surgeries we saw because we did the mini med course. They had different surgeries on that, and it was enjoyable just having that social group." (Ppt 20, Current Student, Interview)

Students discussed bonding with their peers during EUE and maintaining the friendships and bonds they made once the programme was over. It highlights the positive

social impact the programme has on gifted teenagers. Participants in the past student and university student cohorts also discussed staying in touch with classmates. They enjoyed meeting people from all over the country, highlighting the strong bond they forged with their like-minded peers.

> "So incredibly amazing. Such like-minded people, and I have made friends for life there that I have met up with many times since we graduated EUE. I loved being there making friends." (Ppt 41, Past Student, Questionnaire)

> "The communal nature of the courses - All the students are there with a certain amount of interest in a given topic, and there is plenty of opportunity to socialise both inside and outside the classroom, more so than in normal school. A brilliant opportunity [EUE] to find out what you want to do in life and, more importantly, find people you want to be friends with for that same life!" (Ppt 47, Past Student, Questionnaire)

5.4.4 Balancing Act

Participants discussed the struggle of keeping up with their EUE coursework, TY projects, and social life during their time in the programme. This was an issue highlighted in Ledwith's (2013) study; TY is a year full of activities, projects, and excursions. At times it can feel like a dichotomy compared to the academic demands of the EUE programme and can lead to feelings of stress expressed by some students.

> "It was kind of like stressful at times because of, well, it was not really that it was stressful, but it was more than with all the other TY activities because we had mini company and Junk Couture**,** and that was all under, and the EUE were all accompanying together at just before Christmas time, and like there was like craft fairs, and then we had to like to finish a dress, and then there were exams, and it was very intense for all a little bit, but overall it was good." (Ppt 43, Past Student, Interview)

> "At the time of the EUE course, many activities were happening at my school; some of these required students to spend much time in the evenings working on projects. For example, Junk Kouture or Mini Company." (Ppt 43, Past Student, Questionnaire)

> "I was getting many projects to do in school and had to keep up with my TY portfolio; because of this, I did not get to do much extra work for EUE, only what was assigned to me. Whenever I felt distressed or sad over the week, I found it hard to focus and concentrate on the tasks. I tended to procrastinate to avoid additional stress. I ended up completing some assignments only a little while before the deadline or forgetting that I had assignments and then remembering the day before they were due." (Ppt 44, Past Student, Questionnaire)

> "Between the course and having TY projects and homework from school, it was difficult to get the time to juggle everything. I had TY projects in school

> simultaneously, so sometimes they took up some time. I was trying to balance and not let either work slip." (Ppt 45, Past Student, Questionnaire)

Interestingly there was still a significant juggling act for students participating in EUE online and past face-to-face students. It appears that there were still a lot of projects and schoolwork in TY for students online, which caused some pressures with EUE coursework. Students could not 'step away' entirely from their schoolwork as they received emails and completed their schooling online. For past EUE students, they got to leave the environment of their secondary school and step onto a university campus and not have to think about school during those hours. Current students in EUE sat in the same environment for long periods for both their schoolwork and EUE coursework; mentally, this may have been an added challenge for previous students trying to balance their workload even if they may have had fewer opportunities during their TY year due to COVID. Another challenge discussed by current students in the programme was balancing their social lives with their friends when restrictions began to lift between lockdowns in the country and keeping up with their academic coursework.

> "There were many occasions where teachers were emailing me during EUE as I was taking part in many activities both inside and outside of school, for example, Student Enterprise. I struggled to focus on my learning as I was constantly thinking about school, and there was a constant stream of emails throughout the day. Studying from home, I was always tempted to walk away from the computer, and I found it difficult to sit at my desk for such long hours at a time." (Ppt 17, Current Student, Questionnaire)

> "I think the one thing that impacted my study the most was when everything started opening back up, and all my friends were meeting up three, four, five times a week. This made me less inclined to study, and I neglected it somewhat for a few weeks." (Ppt 31, Current Student, Questionnaire)

5.5 School: Steppingstone to True Interests

Many students discussed their frustrations with the school's academic side; they enjoyed it and felt the social aspect of the school was essential to experience. Students appear to have a love/hate relationship with their time in school. They enjoy going to school daily to see and socialise with their friends, participate in extracurricular activities such as music and sports and acknowledge this as being invaluable during their school years.

> "I like it, I feel we learn many things we do not need in life, but I enjoy the social side of it." (Ppt 12, Current Student, Questionnaire)

> "I find school very easy (again, especially in TY), and I do very well on most tests or projects that we have to do. I do not find school stressful, and overall, I enjoy it. My favourite part of school is the social aspect of it. I love seeing my friends every day and talking to them. I also enjoy talking to people I would not usually talk to, and I have done that a lot this year in TY." (Ppt 13, Current Student, Questionnaire)

Although the students essentially enjoy the school experience, they mentioned how they felt certain schoolwork and exams were meaningless to them, and they felt their time would be better spent on their true academic interests, such as the subjects they chose to do in the EUE programme. Numerous students felt their work was "monotonous"; if they were not interested in the subject, they became "easily bored" and disengaged. Boredom was a very significant theme in the data presented.

> "I have a love/hate relationship with the school. I love to learn but find school boring because I know most of the material we teach. Since primary school, I have been learning in my free time as a hobby. I was quite far ahead of my peers in primary school, so teachers would give me projects to do on the side of schoolwork, so I have always been learning ahead of most of my peers, which has somewhat caused me to become a victim of my drive and now I am even more bored in classes. I do love learning, but I find that the work given in school is not very engaging and is very monotonous for me." (Ppt 33, Current Student, Questionnaire)

> "I find school to be very monotonous at times. The scope of knowledge is very caged in and limited within a curriculum. I feel students do not get the opportunity to expand their capabilities. I feel as though school is a complete creativity killer! Multiple intelligences, capacities and special needs are not considered, nor are they allowed to explore what they are good at and passionate about. Students are not challenged creatively and are thought to base their self-worth on their exam performance; it is somehow a determining factor whether you are 'smart' or not. Unfortunately, secondary school often makes us feel limited, lost and does not bring out the best." (Ppt 36, Current Student, Questionnaire)

> "If I could, I would skip the leaving cert and go straight into university. Being in an environment where everyone has the same interests and dedication will be way more enriching than secondary school environments. Sometimes, I would like to do different tasks than we regularly do in class. In school, I feel under-stimulated and get bored often because we do a lot of mundane work (in my opinion). I have gotten complaints that I am not "fulfilling my potential" (even though nobody has ever told me what that "potential" is). I asked the guidance counsellor to help with my boredom problem, but they did nothing. Most teachers have said they are disappointed in me, which did not feel very nice. I do not feel like my academic

needs are being fully met in regular school." (Ppt 4, Current Student, Questionnaire)

Many highlighted how they preferred the "focused and stimulating" learning style of the EUE programme because they could dive into their true interests. They enjoyed the discussions and independent nature of their EUE coursework, finding meaning in their learning. Many students understand the importance of their schoolwork, and how well they do academically in their Leaving Certificate examinations will determine their future in university. They must work hard now to fulfil their wish to engage their true interests. Students mention that "schoolwork hinders their true academic interests" and are "just not challenged enough in school".

> "I find that secondary school is not very challenging, and this makes it kind of dull, so to be able to learn [in EUE] more complex things and to be engaged in thinking etc., is great." (Ppt 33, Current Student, Questionnaire)

> "Before attending the EUE programme, I found school difficult, not academically, but emotionally and socially. I found the work boring and was getting distracted from it very easily and did not want to put any effort in, both in class and at home. Before the EUE programme, I was not the best student, I still got good grades, but they were worse than what they could have been as I had no interest in most of what I was learning and never wanted to put in the effort. Socially I was very awkward at times and would hang around with people with no interest in school and general; this caused me to have no interest in school either. I love the work I am interested in and know that even though there is work I would rather not do, it will be worth it in the long run." (Ppt 1, Current Student, Questionnaire)

> "After a while, I get bored of school, or it becomes tedious, but I enjoy it and learning things that interest me. I have always liked knowing the whys of things, and I am starting to understand why it is now in school, so it is helping me put everything together." (Ppt 21, Current Student, Questionnaire)

One of the frustrations mentioned by the participants was the secondary school curriculum and how they perceive it to be rote learning and do not gain any enjoyment of learning. Students highlighted certain subjects in their school curriculum that they felt were unhelpful and a waste of time and yearned for greater depth and less breadth of learning. They wished they could choose fewer subjects in their leaving cert curriculum than the usual seven they complete. The students have a mature perspective on their education and feel that the current school approach "grinds them down".

> "I feel it would be better if I could take fewer subjects that were in more detail rather than taking seven in moderate detail, particularly for the leaving cert." (Ppt 15, Current Student, Questionnaire)

> "I think you want to keep going when you at, tend something like EUE. I think when you are looking forward to something, and it is something you are interested in, it is much more enlightening than a normal school. The transition into 5th year was difficult …especially after experiencing the EUE programme; it is kind of just a step down **…**Junior Cert is just regurgitation. I do not even think I studied for it, to be honest, and like I got on okay, which is not something to be proud of" (Ppt 49, Past Student, Interview)

> "I enjoy school, but I am aware of the limitations mainstream work offers to students who feel they could be stretched further in their work. This is a growing frustration, and I hope the EUE programme will act as an alternative to this learning gap created by schools. Although school is always something I have embraced (socially and academically), providing students with exams and requirements to study a broad range of subjects is quite debilitating considering many of my interests and career aspirations often lie with only a select few." (Ppt 6, Current Student, Questionnaire)

5.6 Making the Most of It: Students Transition to University

During a time, which should be full of new experiences, moving away from home, and meeting new friends when entering university, unfortunately, was impeded by the global pandemic for the participants in the university cohort. The university students discussed their experiences transitioning into higher education during this time. Interestingly the participants felt their experience in the EUE programme had a part to play in choosing their university course and getting first-hand experience of independent learning, which helped in their first year in university.

Participant 59 studied Psychology at EUE and is now studying Bachelor of Education (Primary Teaching) at DCU. During the interview, she discussed a crossover in a Psychology module which was a part of her first-year programme of study and the material covered during her time in EUE.

> "Yeah, a psychology [university] module and when she [lecturer] was speaking about it back in September, you are remembering some of the things that you learned back there [EUE], so it was actually kind of handy for that, but yeah it was like a nice cross over." (Ppt 59, University Student, Interview)

Participant 53 studied Engineering in EUE and is now undertaking Engineering at University College Dublin (UCD). He remarks similarly to Participant 59 that the "heads up" EUE gives students to first-year modules.

> "I suppose to some degree, one of the modules I took in EUE was electronic engineering, and I did electronic engineering in my first year [university], so from that perspective, yeah, it gave me a bit of a head-up compared to everyone else". (Ppt 53, University Student, Interview)

Each module in the programmes offered by EUE is carefully selected in conjunction with the head of schools in DCU to give TY students an authentic experience of what they will be studying when they enter university. Based on the interviews with the university cohort, the EUE modules give students a good foundation of what is being studied at this level. Participant 51 also studied EUE Engineering and has gone on to study Engineering at Technological University Dublin (TUD). Participant 53 highlighted that his experience on the EUE programme and getting a taste of Engineering did have a part to play in his ultimate decision to further his studies in this area.

> "I would say so, like when I did engineering with EUE; I did not want to do engineering. I wanted to go into a more science-based discipline…so I had a bit of perspective on what Engineering was then, and as I got other information while trying to make my decision, I would say it had some part to play in my decision. I would say it would have had an effect. (Ppt 53, University Student, Interview)

For many students, the first time they encounter university-style work will be at the expected age. However, EUE allows students to gain this experience while they are 15/16 years old. Participant 52 studied mathematical science in EUE and is now studying Chemical Sciences at Trinity College Dublin (TCD). He commented that EUE helped prepare him for the inevitable transition into a new environment leaving secondary school and meeting new people.

> "I think so; I think it is [EUE] made me way more comfortable with like the kind of college environment of like dropped off and figuring out your way around campus or where to get to labs and stuff but like just being in a place where you do not know anyone" (Ppt 52, University Student, Interview)

> "I am more likely to come up to a random person and be able to start a conversation and meet people. I feel EUE helped in that way socially, and then obviously, the independence of I did not get to live by myself this year. However, if I do ever, yeah, I feel it is a good step in between from leaving cert or secondary school to the college experience." (Ppt 52, University Student, Interview)

Some university students could visit their college campus during their first semester and meet people in their courses. This was due to some students moving to their university dorms or having mandatory laboratory practicals they had to attend when restrictions were beginning to ease. On reflection in their interviews, they count themselves very lucky to have been able to do this.

> "There was like short stay accommodation in DCU, so we did that for a little bit at the start, and my course, you were up every second week for up until Christmas, like until things [lockdown] kicked in, so you had a bit of a social aspect of it, and you got to meet people and things like that and then I had friends who went to

> DCU who did other courses so I had them as well. I feel like I have been luckier than some who have not gotten a chance to be up or meet anyone at all, so yeah, I cannot complain, to be fair. I had the chance to meet people, and I was lucky in that way, but then you would meet other people in the breakout rooms, or you see other people in your year, and they have not been that lucky; they have not gotten a chance to meet anyone so, I count my blessings I think it is the word I am looking for I have been lucky in that sense" (Ppt 59, University Student, Interview)

> "I am probably luckier than most because I had mandatory labs, so I still got to be on campus at least some days a week, and everybody that I met on the course was sound (Ppt 52, University Student, Interview)

During their second semester, there was a complete lockdown in the country, and no one could leave their homes. This forced a few students in the study to move back home and no longer have the independence they were looking forward to when heading off to university.

> "It is not what I hoped for, given the global situation. I went into it with higher hopes, like I moved up to Dublin from Tipperary. Then after a couple of weeks, I was like paying money to sit in my room here and may as well go home like pay less money at home to sit in my room, so after about 2 or 3 months, I moved home, and I have been home ever since. This semester I have not been in college at all. My hopes and plans to go up and meet loads of new people did not come true." (Ppt 53, University Student, Interview)

> "Yeah, like I was able to stay up a few days maybe I had double labs during the week, but that was a few and far in and then this semester [semester 2] I just stayed at home." (Ppt 52, University Student, Interview)

Although many participants count themselves lucky to have met people during their first semester, they still wished they could have met up with people and socialised face to face rather than just mainly engaging online.

> "Not great because, like, I was fortunate that, at the start, they had this thing called student 2 student mentors, so they just like got everyone together. It was like a Q&A, and also, they like any new people on the course to get them into group chats, so just like if I needed help with the course, and it helped at the start, I think the only problems socially was that like while everyone is sound and like I talk in the groups chats and stuff not being able to meet up with people because well like the global climate as it is like it makes a difference cause like not seeing people face to face and not being able to be like yeah so like I feel like that ruins it." (Ppt 52, University Student, Interview)

> "Not fantastic like, I have gotten to know some people from my course but not to the extent that I would like to." (Ppt 53, University Student, Interview)

> "I thought it was good to be fair like; I did not mind the online learning probably as much as, like, obviously better now to be up there and that kind of thing." (Ppt 59, University Student, Interview)

Academically, the participants discussed that they got on very well and accepted that it was inevitable that their university course would be online. Participant 59 mentions that the academic learning style of EUE helped prepare her for the *hands-off* approach in university compared to *handholding* in secondary school.

> "I thought it [EUE] probably gave me a better understanding of what will come. They [instructors] used to be telling us you should learn this, learn this, but it was not like you must learn this and have it done for next week that kind of way whereas that is what school was all centred around, so yeah in fairness I did think it helped a little bit." (Ppt 59, University Student, Interview)

The university cohort appreciated their situation with online classes and felt their respected universities did their best to maintain engagement and participation.

> "In fairness, like they made it as engaging as possible and breakout rooms and all, you kind of had to stay a bit more like tuned in because you would have to talk about whatever we were doing in the breakout rooms and that kind of thing for the group tasks in fairness so as good as it could be that is what we had in fairness." (Ppt 59, University Student, Interview)

> "Yeah, it is pretty ok. It is a different perspective now because I have exams in a week or so, so it is more stressful, but overall, I am pretty happy with it. Because it has been mostly online, I think they did a lot to work with it." (Ppt 52, University Student, Interview)

Some participants enjoyed the opportunity to participate virtually online, access recorded lectures, and gain more autonomy in their learning. It allowed students to structure their day and education in a way that might suit them better than a traditional day in university attending lectures.

> "I loved that everything is recorded, and you can look back on it. I loved that you could see the videos, so I think making the best of it, I enjoyed it." (Ppt 52, University Student, Interview)

> "I would say it is, for me, it is not as bad as people make it out to be academically like; for me, I do not mind doing it online the fact that all the course material is a couple of clicks away and I can use it for references, and if I miss a lecture, I am not falling behind I can catch up and watch the recording. I think it gives me much freedom in studying, and I can study how I want to." (Ppt 53, University Student, Interview)

However, there is a feeling of hope for their second year that they will be able to return to campus and fully experience the university life that they had once envisioned.

> "So, I think next year will hopefully be different." (Ppt 52, University Student, Interview)

> "Yeah, I like it; I am excited now. Hopefully, next year, I can go up there [university campus] and be more like real life and in person. Hopefully, next year as it will be more, we will have more of a chance and more opportunities, but I found it grand in fairness like it was as good as it could have been." (Ppt 59, University Student, Interview)

Overall, the university students seemed to accept that completing the first year online was unfortunate but necessary due to the global pandemic. Having the experience of the EUE programme and getting to peel back the curtain of what university would be like, then having the rug pulled from under them must have been difficult for these students at the time. However, they could highlight the positive aspects they experienced, and it was not just all doom and gloom, showing their adeptness and resilience.

5.7 Conclusion

The study's qualitative findings are presented in this chapter. The case study style described the three cohorts: *current*, *past*, and *university* students' experiences and reflections on the EUE programme. The case study demonstrated the challenges the participants overcame and the happy discoveries they experienced. The qualitative and quantitative data are combined in the following chapter, where both consistency and differences are thoroughly explored. Where the results from these two contrasted methodologies seemed to differ, more profound and perceptive questions were put forward to guide additional research.

Chapter 6: Discussion of Qualitative & Quantitative Findings

6.1 Introduction

This chapter summarises the findings of the qualitative and quantitative sections to provide more extensive suggestions and conclusions. It will discuss the *current*, *past*, and *university* cohorts' experience in the Early University Entrance programme academically, emotionally, and socially. It will review the impact of online learning on participants in the study and consider the significance COVID-19 had for gifted students.

6.2 Adapting to College

There was no statistically significant difference in the Student Adaptation to College Questionnaire (SACQ) (Baker & Siryk, 1984) in all the subscales between the current EUE students and first-year university students. This differed from what was found in Ledwith's (2013) study, in which the early entrants had significantly higher Full Scale Self-Concept, Total Academic Adjustment, and Total Attachment to each first-year group.

One possible reason the current EUE students in this study did not have any significant scores, as previously found, was due to the timing of this study. COVID had a significant bearing on students globally; if anything, it meant EUE students had an authentic university experience of its time, albeit online. Academic adjustment is associated with high grades, a stronger understanding of the material, and students establishing achievable goals. Examining the qualitative data, the student experience on the EUE programme illustrates a positive academic adjustment. Students enjoyed getting the opportunity to participate in accelerated material, which gave them "much more freedom and responsibility" and "more control" of what they were studying. Students noted that the academic material was an 'optimal match', and they thrived being successful and *earning* their grades. One participant noted, "I was really happy with my

exam results; they accurately represented how much work and effort I put in over the semester". The EUE programme appears to have provided students with the environment to excel in their educational journey.

> "Not only has it [EUE] given me more confidence in my academic ability and general, but it has also helped me become more responsible for my education and learning. I have gained more confidence in myself and my abilities by knowing I can achieve high first-year university levels while in TY." (Ppt 19, Current Student, Questionnaire)

Students discussed feeling like they were losing motivation with school, the global climate, lockdowns, and not seeing peers. They feel like they have gotten their *drive* back from the programme, but when they participated in this study, they were in lockdown, and all education was still operating online. Interviews with the University cohort suggest they also adjusted academically in their first year. Although it was online, they stated that the universities did their best and made it as engaging as possible. Some enjoyed recording their lectures and having the course material a few clicks away. It allowed them more autonomy over their learning than a face-to-face day on a university campus.

Examining the second research (Does EUE impact students' adjustment to university?) question, it appears EUE did play a role in the *university* cohorts' adjustment to first year. As highlighted in the interview data, the modules they undertook at EUE gave them a "heads up" for coursework they completed in their chosen first-year course. This may have helped them adapt to the academic coursework, especially when faced with the independent learning style university affords. Many participants continued in their chosen field from EUE to University (such as participants 51 and 53 undertaking Engineering at University and participant 55 continuing with Law in DCU). Another acknowledged that their experience in EUE played a role in his final decision to choose Engineering. It is important to note that students participating in EUE choose the course they may already have a passion and interest in to continue their studies. However, EUE provides the optimum environment that gives them a more accurate insight into university coursework in a subject they are genuinely interested in. Research suggests that academic

environments that challenge and engage gifted individuals at a level slightly beyond their current academic performance can foster personal thriving. These environments also support their intrapersonal and interpersonal growth (Gross, 1994). For some, this helps reaffirm their decision to continue in the field at third level or for others; it may make them reevaluate what they want to do. One student (Participant 59) discussed how she realised psychology was not what she envisioned herself doing in the future following her time in EUE. She is now enrolled in DCU, completing a Bachelor of Education (Primary Teaching) and is very happy with her decision. Seeing what university coursework is like before deciding during their final year in secondary school helps these students make mature and responsible conclusions regarding their education.

As mentioned by the *university* cohort, one aspect of online learning they enjoyed was having full access to recorded lectures. The EUE programme did not record lectures due to child protection. This meant that current students had to attend each class and be more "switched on," perhaps than the university cohort and, to a lesser extent, have more autonomy over their learning. It may have served the EUE students better; that way, they could go over the material, or if they were absent, they could easily catch up watching the recordings rather than just the PowerPoints covered in class. *Current* students highlighted the balancing act they had trying to juggle their TY activities and schoolwork with the academic demands of EUE. Although all schooling moved online and had less traditional activities such as musicals and trips away, students were not afforded the "mental break" of leaving school behind to attend EUE. These students had teachers emailing during EUE, which added challenges compared to past students who could attend on campus.

Regarding attachment, it would make sense that it would be difficult to form an attachment when you have not stepped foot on the DCU campus for the EUE programme. University students highlighted in qualitative data that some were lucky that early in their 1st semester (Sept-Dec) when the lockdown was beginning to ease, they had limited opportunities to go onto campus, some for mandatory labs or had short stay

accommodation that allowed them to be there every second week and meet people. Low levels of attachment are thus unsurprising; it would be challenging during this time to feel an attachment to the university when it is mostly behind a computer screen.

The EUE programme and first-year university students attending online and having a similar experience may explain that there is no statistically significant difference between the two cohorts. However, the EUE programme does seem to have provided some solace for the students during this time, and perhaps, on reflection, they will see they did experience a true university experience, albeit of its time.

6.3 Emotional Impact of the EUE Programme

Overall, most students in all cohorts appear to have a 'normal' level of self-esteem even during a difficult period adjusting to COVID-19 restrictions and online learning. As discussed by Émon et al. (2022), most secondary school students graduating *coped* with the restrictions. The qualitative results support this, with most students stating they got on well with online learning during this period. This was the same for *university* students with very little negative input. They all discussed in the qualitative results the positives they took from their time at EUE, online learning and university. They were confident in their abilities. They met peers they could confide in with similar interests and thrived. EUE students experienced confidence building, maturing, and responsibility. Past students could cope with independent learning because they participated in the EUE programme. However, it can be argued that perhaps these students are already attracted to participating in EUE due to the opportunity for more independent learning. Further research should explore this further.

Research suggests that gifted individuals can have higher levels of self-esteem than their non-gifted peers, particularly in areas where they excel. However, their self-esteem may be more vulnerable to external factors such as social comparison, academic pressure, and parental expectations (Cross et al., 2015). The relationship between giftedness and self-esteem seems complex and can depend on various individual and environmental factors. While gifted individuals may have exceptional abilities in certain areas, they are still human and may struggle with self-doubt and feelings of inadequacy. Creating supportive and challenging learning environments that foster their interests and

abilities and acknowledging the importance of social and emotional development can help support gifted individuals' self-esteem. Compared to equally gifted students who did not accelerate, research indicates that accelerated gifted students tend to have higher levels of self-esteem and a stronger sense of autonomy, with little to no decline in social interactions (Brody & Benbow, 2004; Richardson & Benbow, 1990). Findings from the current study echo this; the EUE programme fosters a supportive environment academically, emotionally, and socially.

Life satisfaction is considered a vital part of human life. It is associated with many psychological variables, including but not limited to stress management, social acceptance, happiness, and a sense of responsibility and meaning in life (Gilman & Huebner, 2006). Life satisfaction strongly influences an individual's self-perceptions, behaviour, and attitude, making it a prominent variable to examine. Within giftedness research, Streznewski (1999) highlighted that an individual's life circumstances strongly influence their overall life satisfaction. Should gifted students be supported and met with positive consequences, they are more likely to strive in adulthood and report greater later life satisfaction compared to those whose giftedness was perceived as a barrier and negatively perceived (Alshehri, 2020; Perrone-McGovern et al., 2011; Persson, 2009).

Overall, most participants in the study reported that they were satisfied with their lives. Examining the qualitative data, this appears to coincide with these findings as most enjoyed their experience on the programme with little or no mention of struggles with the academic, emotional, or social aspects of EUE. Many acknowledged that the pandemic was a difficult time for everyone and understood that their current education (school, university) did the best they could and adapted to online learning. It is important to support gifted students in addressing their unique challenges. By doing so, we can help ensure that gifted students can reach their full potential and experience high life satisfaction.

Despite the importance of understanding the life satisfaction of gifted adolescents, relatively few studies have specifically examined this topic (Jones, 2014). The Study of Mathematically Precocious Youth used large samples to examine the life satisfaction of gifted adults. The research reveals that gifted individuals had high levels of life satisfaction in their early and middle adulthood (Lubinski et al., 2006, 2014). Bergold et al. (2015) investigated the life satisfaction of intellectually gifted and non-gifted German

high school students. Overall, there was no difference in reported life satisfaction between the groups. Their findings support previous empirical data that giftedness is not a target factor for impaired psycho-social well-being, such as life satisfaction.

6.4 Personal Development

Overall, most participants scored around 30-35 on the General Self-Efficacy scale (Schwarzer, 1992), indicating a high level of self-efficacy. General self-efficacy refers to a person's belief in their ability to perform tasks and achieve goals in various situations (Bandura, 1998; 2006). General self-efficacy is a broader construct than domain-specific self-efficacy; it identifies a person's degree of assurance in their capacity to effectively manage various demands, novel circumstances, and pressures (Schwarzer & Born, 1997). Gifted students with exceptional intellectual abilities may have higher levels of general self-efficacy because they are often successful in academic pursuits and are recognised for their talents (Carpenter, 2007). Pajares and Usher's (2008) meta-analysis suggest that high levels of self-efficacy are associated with various positive outcomes, including greater academic achievement, better mental health, and increased resilience in the face of challenges. Gifted students who have high levels of general self-efficacy may be more likely to take on challenging academic tasks, persist in the face of difficulty, and feel confident in their abilities.

For students attending EUE, this may be the first time in a while that they are participating in a new, challenging environment and outside their comfort zone. As stated by some, "before taking part, I was fearful" (Participant 1). "I did not know what to expect as I had not done anything like this before" (Participant 8). It could be argued that students chosen to be a part of the programme would already have a high level of general self-efficacy to pursue this novel task rather than EUE being the cause of their reported high levels. Parjares (1996) highlights that when gifted students are not adequately challenged but do well in school with minimal effort, this can lead to an unsupported and hubristic self-efficacy. One *past* student rather meekly discussed feeling unchallenged in school and the knock-on effect this had on his Junior Certificate examinations. "I do not even think I studied for it, to be honest, and I got on okay, which is not something to be proud of" (Participant 49). However, examining the qualitative data, it appears that EUE accommodates the preferable environment to foster students' general self-efficacy. A gifted individual's self-efficacy develops when they complete challenging activities, put

in consistent effort, and face real challenges (Chan, 2006). A *Current* student (participant 27) stated, “This was the first time that I was just absolutely pushed, and I could not even do it perfectly. It was not easy, and I liked that. It humbled me a lot.” Based on the data, it is inferred that the environment EUE provides students helps aid their general self-efficacy by providing them with adequate challenges.

Many highlighted in the qualitative data their love of engaging in a subject that genuinely captivated their interests and their intrinsic motivation from completing challenging EUE coursework. Therefore, educators and parents of gifted students need to foster a growth mindset, provide opportunities for students to explore their strengths in various areas, and support their development of self-efficacy in all aspects of their lives. This can help gifted students to reach their full potential and lead fulfilling lives (Boazman & Sayler, 2011).

Self-regulation refers to the ability to manage one's emotions, behaviours, and attention in ways that support learning and goal attainment (Zimmerman, 2002). Gifted students have advanced intellectual abilities and can be highly motivated but may still need help self-regulating to reach their full potential. Some key self-regulation skills that can be particularly important for gifted students include emotional regulation, goal setting, time management, attention regulation, and self-reflection. Examining the qualitative data, most students discussed how EUE played a role in improving many of these key skills helping them become more responsible for their education and learning and giving them more confidence in their academic ability.

Much of the learner's motivation is vital to the growth and implementation of self-regulation (Chang & Wu, 2003; Schunk & Zimmerman, 2013). Motivation is constantly required to retain an interest in learning and to guarantee perseverance in the effort. According to Pintrich (1999), motivation may foster and sustain self-regulated learning, meaning that students are inspired to participate in a task if it is significant, engaging, and practical to them. One *current* student discussed how it was “more humbling to put in way more effort” (Participant 27) into his studies on the programme and how it demonstrated to him that “more effort put in does give you better results”. Studies have focused on practical strategies for creating engaging learning settings and projects that can raise students' motivation through active involvement and support this viewpoint (Chan Lin, 2009; Keller, 2008). While some gifted students may already demonstrate high

levels of self-regulation, it is evident that the EUE programme provides the ideal environment to develop and implement their self-regulation skills. EUE helps support the development of self-regulation skills in gifted students by providing appropriate challenges and motivation.

> "I've also become more confident about myself and what I am capable of and have realised that all I lacked was the motivation to do so, which was something I only realised from throwing myself into my work in the EUE programme." (Ppt 1, Current Student, Questionnaire)

While gifted students may be more likely to demonstrate high levels of self-regulation skills, it is not a given, and individual differences should be considered. Woods (2023) presented early research examining students who attend Irish disadvantaged schools and their participation in the EUE programme. Ireland attempts to address educational inequity by using a plan called Delivering Equality of Opportunity in Schools (DEIS) initiated by the Department of Education and Skills (DES). The program identifies schools that serve populations with concentrated educational disadvantages and deems them eligible for additional assistance and resources. EUE allows DEIS-linked schools to DCU to pay a reduced fee, and they are accepted based on their high motivation and teacher recommendation forms. Preliminary findings have found a strong correlation between students' attendance and their exam results. Many DEIS students with high participation complete the final exam and assignments and perform just as well as non-DEIS students. Some non-DEIS students opt not to participate in the final exams and assignments. Again, there appears to be a correlation between their low attendance record and their decision not to sit the exams. Examining the DEIS and non-DEIS students, there appears to be a sense of fight vs flight. Those who attend each week appear to be engaging in the course and receive First Class Honours compared to students who are absent for three or more classes and opt not to sit the exams. Further research is warranted to see what factors are causing students to miss days, such as prior commitments at home or school and not wanting to sit the exam. This could help future EUE students, such as providing extra support for these students and perhaps enhancing their self-regulation skills. Encouraging and supporting the development of self-regulation skills can help gifted students reach their full potential and thrive academically and personally (Zimmerman, 2002).

> "You must be disciplined about homework and studying to stay on top of things. It also changed my perspective on education. In my third year, I was quite pessimistic about schooling, learning, and that sort of thing. This course [EUE] has made me more optimistic, open-minded, and enthusiastic." (Ppt 4, Current Student, Questionnaire)

> "We had a lot more independence. We were kind of just told to sit here and pay attention. The more attention you paid, the better it was. The teacher would not tell you to pay attention or anything." (Ppt 27, Current Student, Interview)

Examining the results from the current study, it is clear that the EUE programme positively impacts gifted students and their self-regulation skills.

6.5 Experience of Online Learning

Overall, all participants appear to have had similar experiences with online learning. However, there is a statistically significant difference in the instructor support subscale for current and university students. Based on the mean ranks, current students had more instructor support in online learning than university students felt they had. One potential explanation is that instructors on the EUE programme had much smaller class groups (24) compared to university lecturers and were able to form good connections with their students. The instructors also had a smaller teaching workload (only 3-5 hours a week) than full-time university lecturers. Based on qualitative data, there was a heavy emphasis on instructor support. Numerous participants highlighted overwhelmingly positive and fun experiences facilitated by the instructors on the programme. They "are knowledgeable…friendly and supportive" (Participant 4). The students highlighted that the instructors were passionate and made the lesson more fun allowing for discussions which enhanced their learning experience and made it enjoyable.

One aspect of the EUE programme that profoundly impacted current students during this time was the Wednesday evening socials hosted online. Interestingly, students were found to turn on their cameras and were fully engaged during the social activities, in stark contrast to their classes online. The social evenings were optional, so it could be that the students who attended were the ones who were yearning to engage and get the

most out of EUE fully. Students who were less forthcoming on camera in class may have also decided to not participate in the weekly social evenings. Examining the data, the students who attended the social evenings were thankful for the experience and the chance to have more of a social element during their time online with EUE.

Examining the qualitative data from university students, there was little mention of their lecturers. Largely, they felt that the institutions did the best they could during a difficult time and "made it as engaging as possible" (Participant 59). The lectures were recorded for the university students allowing them to go back and revise on their own schedule. EUE students did not have the facility (due to child protection), and perhaps this meant the students needed to be more 'switched on', asking questions and engaging with their instructors and classmates on the course as they could not watch recorded lectures. During this time, it also facilitated group discussion and the use of breakout rooms and was as organic a learning environment as possible.

It appears past EUE students in their senior cycle of secondary school had a difficult period based on the Depression, Anxiety and Stress Scale – 21 (DASS-21) (Lovibond & Lovibond, 1995) results. It was a time where the country was shut down, and uncertainty about their upcoming state examinations, which determine third-level places. The current students could engage in an optimal academic environment, albeit online and participate weekly in class and activities with like-minded peers.

The statistical analysis of the DASS-21 questionnaire indicates little variance in anxiety and stress, as measured by this scale. Statistically significant differences were only found on the DASS-D (depression) subscale. All other comparisons were nonsignificant.

One possible reason for this finding is that the current students in the EUE programme could engage with accelerated material in a subject they were truly interested in during a time of academic (school) and social isolation. Examining the qualitative results, current students reported that they thrived in the more optimal academic environment that EUE provided. The students reported they had much more responsibility and control in their academic work compared to school, where "teachers check up on your work and tell you

what to change" (Participant 31). Students discussed the personal impact the EUE programme had for them, including "the opportunity to build confidence" (Participant 37) and how the experience helped them to get out of their "bubble as a person" (Participant 52).

The current EUE students discussed how they felt they "met their crowd" and could finally engage in "academic conversations" with like-minded peers. The current students were guaranteed twice weekly opportunities to engage with like-minded peers from their online Zoom classroom and the social evening hosted every Wednesday. During a complete lockdown, students were happy to have the opportunity to socialise online and "discuss different courses and schoolwork and own interests". They enjoyed interacting with students "who are all as interested in the subject and eager to learn".

Past students reported higher levels of depression based on the DASS-D subscale. Past students comprised six 6th year students and three 5th year students. For those who completed the programme in 2019 (and were now in their 6th year of secondary school), their EUE experience was on campus. They got a feel for the university environment. The three 5th year students who completed the programme in 2020 had their time cut short (with lockdown from March 2020) and thus had to finish their course online. For some of the *past* students, going from an academically thriving environment to traditional schoolwork being conducted online was a difficult transition. One student encapsulated this sentiment, stating:

> "The transition into 5th year was difficult generally…after experiencing the EUE programme, it is kind of just a step down from everything." (Ppt 49, Past Student, Interview)

An overarching point discussed by the participants is their boredom problem in school and feeling under-stimulated and "limited within the curriculum" (Participant 36). Students discussed that they *do not* feel their "academic needs are being fully met in regular school" Participant 4). Many participants said they would prefer to learn subjects they found interesting in greater depth and less breadth of learning as they find "schoolwork is a hindrance to other academic interests" (Participant 15). Having a glimpse of their future by participating in the EUE programme and returning to their school following this experience could have impacted the past students' DASS-D results.

Looking back at the research questions, the first question wanted to investigate the perceived student experience of EUE? Similar to Ledwith (2013), students seem to get on very well in the programme academically, emotionally and socially. EUE provides the ideal environment for highly talented and motivated students to push themselves out of their comfort zone and provide adequate challenges during school when they can explore different avenues and find themselves. TY is an excellent time for all Irish students to be often involved in projects, work experience etc. However, it lacks the academic stimulation that gifted, highly motivated students crave. Students also met people with diverse viewpoints and felt *enlightened* by this experience.

Students highlighted a sense of belonging in the EUE programme. They met like-minded peers, and many felt they *found their tribe*. They the academic conversations with others, something they did not feel was available the same extent as their classmates in school. The social side of EUE also fed into their academic work as they thrived having relatable talks about their subject interest and finding others who have the same work ethic as them.

EUE gives students a *telescope into the future*. Having this experience at an earlier age allows them to have a glimpse of what their future could be like, and it is something that they are very eager to get to. One participant noted that if they could skip the Leaving Cert and go straight into university, they would. They relished the opportunity to study a subject they had a great interest in, in-depth, rather than lots of subjects at surface level (in school). They were now excited and looking forward to going to university. They have a mature perspective for their future and are working hard.

> "I think it's like one of the best things I have ever taken part in, and it has done more to prepare me for my future than many things have." (Ppt 43, Past Student, Interview)

The second research question explored if EUE impacts students' adjustment to university. Based on the data, EUE did have some role in the participant's journey to university. The university cohort discussed their insight into the modules they had taken, helping them better adjust academically. The self-directed learning of EUE prepared them for academic work. They talked about how their time in EUE factored in deciding what to study in university, with some participants continuing in the same field. It gave them

an insight into what university will be like meeting new people; finding their way around a new environment; essay writing; exams at third level. Although they had mostly attended online, they seemed to have adjusted well, understanding it was necessary and were optimistic for the future.

The final research question examined what impact Covid had on Irish gifted students. Overall, all three cohorts seemed to fair reasonably well during the pandemic, adjusting to the transition to online learning (though some are better than others). There appeared to be a love/hate relationship with online learning for the participants. Some perceived the benefits of online learning. For those who enjoyed it, it was removing any social anxiety that may come with face-to-face classes in a new environment, the comfort of your own home; and not having to get ready and travel to campus. The *university* cohort appreciated having more autonomy over their learning, afforded by recorded lectures and materials. This meant they could devise their schedule and had much more freedom than a traditional face-to-face university experience. Participants who did not enjoy online learning felt a lack of engagement with others and found it difficult to connect when cameras were turned off.

6.6 Conclusion

This discussion integrates quantitative and qualitative data results to create a thorough analysis of the Early University Entrance programme. It illustrates the program's impact on the participants. Academically, they quickly acclimated to a very different environment and realised that university education was significantly different from school, and the challenge they encountered was a welcomed change. Socially, they were happy to find their tribe and meet like-minded peers they could have academic conversations. Something they felt they could not do to the same extent in school. Some past students had difficulty transitioning into 5th year following their experience in a more optimal learning environment. Many participants discussed how they felt the school curriculum could be improved, such as less depth and more breadth in their chosen subjects in the senior cycle. There was a mixed reaction to online learning; some loved its benefits, but many discussed the disconnect, with many students keeping their cameras off during class.

It appears that the EUE programme did have some influence on the *university* cohort in helping them choose the subject they wanted to study in university and helped prepare them for the independent style of coursework expected of them. Following this discussion, the following chapter will suggest the study's findings.

Chapter 7: Conclusion

This study investigates the impact of the Centre for Talented Youth, Ireland (CTYI) Early University Entrance (EUE) programme on students' transition to their first year of university. EUE is a dual enrolment programme that permits high-achieving Transition Year students to attend CTYI's main university, Dublin City University, one day per week during the academic year while continuing to attend school. These students complete two university modules over one or two semesters. This dissertation investigates the experiences of current and former students in the senior cycle of secondary education and alums students in their first year of college. The research employed a mixed-methods, case-study approach to understand the EUE programme better.

The Early University Entrance programme has grown significantly since its inception by Ledwith (2013). Participants from the current study's results positively impacted all three cohorts. The students encountered a level of intellectual challenge they yearned for in school, which assisted in their development as learners and individuals. Students were able to adapt to the demands of the academic environment and thrived, knowing they could do well completing university coursework at this age. They also blossomed as individuals, becoming conscientious young adults. With the programme's perspective, they became more mature within themselves and about their academic futures. For *past* students who participated in the programme and were in their senior cycle of secondary school they found it slightly difficult to readjust back to school after learning in a more fitting academic environment with EUE. However, this group also had to contend with the challenges of school in a global pandemic and were faced with online learning and uncertainty of their upcoming state examinations. The *university* cohort consisted of participants who attended EUE three years prior and are now in their first year of university. Their experience of EUE appears to be strongly positive, and it did

have some part to play in their journey to the first year of university. It gave these participants a first-hand experience of what to expect academically and helped them decide what area they would like to study in university.

The results of this study contribute to the body of knowledge on concurrent enrolment and early entrance to university programmes. It reveals, as have countless other studies, that such programmes offer gifted individuals an optimal match. It also finds that the EUE programme has a lasting positive impact on those currently enrolled and alum students venturing into third-level education.

This study showcases a snapshot during the COVID-19 pandemic highlighting some challenges students face, such as online learning. In all three cohorts, the students coped reasonably well with their challenges during this time, demonstrating their adeptness and resilience.

However, the results of this study are particular to Ireland. Thus, it is important to consider this when making analytical generalisations. Despite the cultural setting, the programme features novel characteristics that set it apart from other concurrent enrolment models. Unlike other programmes, which are offered throughout high school, it is only offered during a single year (transition year) and for a specific amount of time. Unlike in US universities, where there is very often the facility to transfer earned credits, there is no official agreement. Individuals participate to reap purported benefits, such as increased learning opportunities, the ability to mature, time away from school, etc.

The current study expanded on Ledwith's (2013) research. It demonstrated the positive impact EUE has on gifted individuals in Ireland during their time in the programme and academically, emotionally, and socially entering university. Overall, the findings concluded similar results as Ledwith (2013) when the programme was first established. Since then, the programme has successfully enrolled an average of 550 students each academic year.

7.1 Limitations

This study is, of course, not without its limitations which will now be addressed. There was a limited sample size, especially with only 9 *past* students and 10 *university* students. The researcher found it difficult contacting *university* students to participate in the programme as they were no longer affiliated as CTYI students and perhaps were not too interested in engaging in research with a programme they completed almost three

years previously, especially during a global pandemic. It was also difficult to gather *past* students as many were facing possible state examinations and study., A few participants withdrew, citing that they were concentrating on their senior cycle studies. During the height of the pandemic, there were necessary restrictions in place. However, this did impact the recruitment of participants. It was not as easy to engage and recruit students as it may have been in past years, for example, walking into classrooms and handing out information regarding the study or meeting alum students coming to work on our residential summer programmes. Although Zoom has many benefits, it is important to highlight how many individuals during this time were behind a screen grabbling with the unknown surrounding the pandemic. It is understandable why students may have decided to opt out of further time behind a screen to participate in the current study. Overall, this does provide a limited snapshot of *past* and *university* students' experience of the programme.

It would have been helpful to administer the quantitative measures at the start of the academic year for all participants and again at the end of the year to see any differences; however, this was not possible for the current study due to time constraints. Therefore, it is important to understand this thesis's findings within the research context and consider these limitations.

7.2 Future Research

The current study's findings pose more in-depth queries about the EUE programme and suggest ways in which it may be further investigated. Since the author completed the current study, the *university* cohort has been able to return to their respective universities. It would be interesting to see how these students are now coping with face-to-face lectures and mingling with their peers. The EUE programme also maintained a live stream of classes for students who could not attend the campus. Follow-up studies could examine if there was any difference in students who attended in person compared to those who may have mostly stayed at home online.

As mentioned, it was difficult for the researcher to gain participation from *past* and *university* students. Students in their final year of secondary school cannot participate in courses in CTYI as it is an important academic year before they complete their state examinations. This means that by the time they enter university, they have not attended courses with us for over a year. It is suggested that CTYI may offer a programme designed

for 6th year students to participate in and build relationships with these students before they venture into third-level education. It is important to note that during the pandemic, the courses held by CTYI were limited and online. This may have impacted students' experience and feeling less of a "connection" than previous CTYI students. It is also suggested that CTYI keep in closer contact with past students after they finish, for example, notifying them of potential vacancies and having them return as staff members. It may make it easier for future research to be conducted for this cohort. There is limited research in the area of gifted adults, which could help bridge the gap to investigate further how CTYI helps aid gifted students while they are students and out in the world.

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Appendices

A. Consent Form

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Appendix A

An Empirical Investigation of The Early University Entrance Programme in CTYI

CONSENT FORM

This survey is part of the research being conducted by Cathy Woods who is a Masters by Research student in DCU. This research project is being supervised by Dr. Catriona Ledwith who is the assistant director of the Centre of Talented Youth Ireland in DCU.

Please contact the researcher if there is anything that is unclear or if you would like more information.

The Research Aim

The aim of this research study is to examine the student experience in the Early University Entrance (EUE) Programme in CTYI. This includes gathering information about student's perceptions of EUE and other potentially related variables such as academic, social and psychological issues. By choosing to participate in this research study participants will further the knowledge of the impact the EUE programme has for students and gifted education.

Your voluntary participation is completely confidential, and the researcher will protect all your information.

Consent

I give my consent to participate in this study and understand that I may withdraw from the study at

any point.

By continuing to complete the survey you:

•Consent to participate in this research study

•Confirm that I have read and understand the information sheet for the above study and had the

opportunity to ask questions

•I understand that my participation is voluntary and that I am free to withdraw at any time.

•I agree to take part in this study.

•I understand that data collected about me during this study will be anonymous before it is

submitted for publication.

Name: _____

Date: _____

Appendix B

Interview Questions for Current EUE Students

1. Have you attended any prior courses held by CTYI before EUE, if so what?
2. Do you plan to attend any other courses now after EUE?
3. What aspects of EUE did you most enjoy?
4. What were lectures and college work like?
5. How did you find attending EUE online? (academically, socially)
6. What aspects of EUE did you struggle with (academic and non-academic)?
7. In your opinion, how well did you keep up with the pace and demands of EUE?
8. What was your social (non-academic) life like while attending EUE?
9. How did you find interacting with others online in your class?
10. How did you find your instructors on the course?
11. Did you engage with your EUE subject beyond your set work? (e.g. own 8. reading, tv documentaries etc.)
12. What results are you striving for? (exam or otherwise)
13. What did you want to get out of Early University Entrance, and did you get what you hoped you would?
14. In general, did EUE meet your expectations?
15. Is there anything you would change about the course you attended?
16. Describe your thoughts/beliefs now toward university, in general? (not in terms of Early Entrance
17. How do you feel about school?
18. What outside distractions affected your study at DCU? (you can mention personal and school stuff here)
19. Describe the type of student that you see yourself as

20. Did you change as a person, do you think, by going to university at this age? If so, in what ways?
21. What do you hope to study when you do eventually return to university?
22. What advice would you give to incoming students on dealing with the academic demands of university?

Appendix C

Interview Questions for Past EUE Students

1.Did you attend any prior courses held by CTYI before EUE, if so what?

2. Did you attend any courses held by CTYI after EUE, if so what?

3. What was your experience like in the EUE programme? (academically, socially, emotionally)

4. What did you want to get out of EUE, and did you get what you hoped you would?

5. How did you find your instructors on the course?

6. Is there anything you would change about the course(s) you attended?

7. How was the transition into 5th year following the EUE programme?

8. How have you found attending school online?

9. Do you think the EUE programme helped you prepare for University? (academically, socially)

10. Do you have any idea what college or course you would like to do in University?

Appendix D

Interview Questions for University Students

1. Did you attend any prior courses held by CTYI before EUE, if so what?
2. Did you attend any prior courses held by CTYI after EUE, if so what?
3. What was your experience like in the Early University Entrance programme? (academically, socially, emotionally)
4. What did you want to get out of Early University Entrance, and did you get what you hoped you would?
5. Is there anything you would change about the course(s) you attended?
6. What college and course have you chosen?
7. How was the transition from secondary school into University life for you?
8. How are you finding your first year of university?
9. How have you found attending university online? (academically, socially, emotionally)
10. Do you think the EUE programme had any impact on your transition into university? (academically, socially, emotionally)
11. Do you have any plans for when you finish your undergraduate degree?
12. Do you have any advice for incoming EUE students?

Appendix E

Current Student Questionnaire

1. What do you expect classes and schoolwork to be like in the EUE programme?
2. In general, what do you expect university life to be like?
3. What do you think EUE social life will be like?
4. What aspects of EUE are you looking forward to?
5. What kinds of things are you fearful or apprehensive about in attending EUE?
6. How do you think your sense of who you are or what kind of person you are will change
   while you are attending EUE?
7. How do you feel about school?
8. Describe your feelings toward university, in general? (not in terms of Early Entrance)
9. Describe what you are like as a school student? (academically, socially, etc.)

Appendix F

Experience of Early University Entrance

Q1. What programme(s) did you Study in EUE? If you completed two semesters of different modules please select those that apply

Q2. What aspects of EUE did you most enjoy?

Q3. What were lectures and college work like?

Q4. What aspects of EUE did you struggle with (academic and non-academic)?

Q5. In your opinion, how well did you keep up with the pace and demands of EUE?

Q6. What was your social (non-academic) life like while attending EUE?

Q7. How did you find interacting with others online in your class?

Q8. Did you engage with your EUE subject beyond your set work? (e.g. own reading, tv documentaries etc.).

Q9. Are you happy with the results you achieved? (exam or otherwise)

Q10. In general, did EUE meet your expectations?

Q11. Describe your thoughts/beliefs now toward university, in general? (not in terms of Early Entrance)

Q12. How do you feel about school?

Q13. What outside distractions affected your study at DCU? (you can mention personal and school stuff here)

Q14. Describe the type of student that you see yourself as.

Q15. Did you change as a person, do you think, by going to university at this age? If so, in what ways?

Q16. What do you hope to study when you do eventually return to university?

Q17. What advice would you give to incoming students on dealing with the academic demands of university?

Q18. Which universities will you be considering in your CAO/UCAS application?

Appendix G

Descriptive Statistics for Quantitative Measures

Test/Subtest	**# Items**	**Current Students**		**Past Students**		**University Students**	
SACQ		**Median**	**SD**	**Median**	**SD**	**Median**	**SD**
Full Scale Score	67	392	69.92			394	52.98
Academic Adjustment		149	29.48			150	26.22
Attachment		94	16.27			101	10.89
Personal-Emotional Adjustment		82	21.58			74	15.44
Social Adjustment		108	23.52			113	22.99
Rosenberg Self-Esteem Scale	10	29	5.74	26	4.56	29	4.12
Satisfaction with Life Scale	5	25	5.74	27	5.61	27	4.91
General Self-Efficacy Scale	10	31.5	4.39	31	3.57	33	4.06
Self-Regulation Scale	63	220.5	25.01	213	14.53	215	21.42
DELES							
Instructor Support	8	4.44	0.58	4.00	0.53	3.56	0.60
Student Interaction & Collab	6	3.67	0.59	3.7	0.59	3.5	0.66
Personal Relevance	7	3.79	0.67	4.0	0.70	3.93	0.50
Authentic Learning	5	4.00	0.66	3.8	0.86	4.40	0.83
Active Learning	3	4.00	0.78	4.0	0.69	4.00	0.65
Student Autonomy	5	4.30	0.61	4.0	0.59	4.40	0.53
Enjoyment	8	2.88	0.84	3.1	0.96	2.00	0.74
DASS-21	42						
Depression Subscale		8	8.59	18	8.43	13	8.04
Anxiety Subscale		10	6.69	12	8.25	11	5.25
Stress Subscale		14	7.17	22	7.17	16	5.10