

Athlone Institute of Technology



***An Examination into the Transition to Third Level
Education for Students with Visual Impairments***

Dawn Murtagh

Master of Arts in Child and Youth Studies.

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Declaration

I, Dawn Murtagh, declare that this dissertation and the research involved in it are entirely the work of the author. It has not been submitted to any other Higher Education Institution and it has not been submitted for any other academic award in this Institute. Any work of other people that has been used has been fully referenced.

Signed: _____

Date: _____

Dawn Murtagh

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Abstract

This study embarked on an examination into the Transition to Third Level Education for Students with Visual Impairments. It conducted an exploration of the challenges and successes of the transition to third level education for students with visual impairments. The literature review detailed the existing body of knowledge concerning the transition experiences of students with visual impairments to third level education. A qualitative methodology was used to ascertain the information displayed in this study. This took the form of semi-structured interviews. Semi-structured interviews provided an in depth knowledge of the experience of visually impaired students who have embarked on the transition to third level education as participants were given the opportunity to freely express their views and opinions. Interviews were conducted with five young people with visual impairments who have previously made the transition to third level education. Participants were selected using purposive sampling. After interviews were conducted they were transcribed verbatim and thematically analysed. Findings from the study revealed that students receive varied supports depending on their individual needs when transitioning to third level education including assistive technology and examination accommodations. Challenges encountered by students with visual impairments were highlighted such as accessing learning material, physical environment, navigation, unsuitable assistive technology and a lack of understanding from staff. The findings suggest that support from disability support services, lecturers, peers and students' self-determination and self-advocacy were major contributors to their success when transitioning to third level education. It also emerged that achieving their third level qualification, gaining independence and increased confidence were considered successes for students with disabilities. Research outlined in the review of literature was discussed in detail in relation to the findings which emerged from this study. This study made recommendations for practice to promote the participation of students with visual impairments in third level education. The findings identified recommendations made by participants to promote the participation of students with visual impairments in higher level education. These included participants' recommendations to facilitate tailored inductions for students with disabilities entering third level education and providing the opportunity for students with visual

impairments to attend trade fairs to keep up to date with new assistive technology available to them. Finally, recommendations were made by the researcher. Some of which included, offering summer camps to students with visual impairments transitioning to third level education which provide assistive technology and orientation training, study and independent living skills. Another recommendation involved higher education institutions allocating a student ambassador to link with secondary school students and visiting teachers for visually impaired students to provide information and promote the participation of students with visual impairment in higher education. It is also recommended that higher level institutions are audited to insure that the physical environment of campuses are fully accessible to all students.

1.0 Introduction

“Young adults with visual impairments need to become skilled at teaching others how to teach them” (Erin, 2011).

This study set out to explore the experiences of students with visual impairments transitioning to third level education. A report conducted by the Association for Higher Education Access and Disability (AHEAD) during the academic year of 2015/16 discovered that even though the participation rates of students with disabilities had increased by 4% year on year, the numbers of students with visual impairments in higher education has decreased by 10% in the academic year of 2015/2016. The report has found that in the past five years the growth of students with visual impairments in higher education has been three times slower than that of the general population of students with disabilities (AHEAD, 2017). Relatively little is known about why students with visual impairments seem to be underrepresented in higher level education.

There is a dearth of research on the experiences of people with visual impairments transitioning to third level education. Research conducted by AHEAD (2008) focused on student’s transition mainly from the perspective of second level education. There are relatively few accounts of the experiences of students with visual impairments adapting to third level education in Ireland. It is beneficial to ascertain a wider perspective from students and young people with visual impairments who have made the transition to third level education to gain an insight into possible solutions and addressing existing barriers to access third level education.

The aim of this study is to explore the challenges and successes of the transition to third level education for students with visual impairments. The objectives of this study are:

- To investigate the supports available for students with visual impairments transitioning to third level education.
- To explore the challenges experienced by students with visual impairments entering third level education.

- To explore the successes experienced by students with visual impairments in third level education.
- To ascertain participants' views on what can be done to promote the participation of students with visual impairments in higher education.

The experience of transition can be disconcerting for all young people. Nonetheless, it can be particularly challenging for young people with visual impairments. Not only do they face the typical challenges that accompany transition for all young people but they also face adapting to a new environment and creating a new network of supports to meet their needs (Erin and Wolffe, 1999; Schneider, 2001). In order to ascertain the challenges and successes of students with visual impairments in higher education it is important to investigate the lived experience of transitioning to higher education. It is vital to consider both the social and academic challenges and successes for students with visual impairments to gain a holistic insight to their experiences.

2.0 Literature Review

2.1 Introduction

This section reviews literature on the transition of students with visual impairments to third level education. It will provide an outline of policy provisions for students with disabilities in education. It will uncover the prevalence of students with visual impairments in higher education and identify the supports available to them. The section will go on to evaluate existing research pertaining to the challenges and successes experienced by students with visual impairments transitioning to third level education. All literature reviewed in this section is relevant to the current study topic.

2.2 Policy and provision for the inclusion of students with disabilities in education

In the last two decades Ireland has witnessed significant developments in policy and provision for young people with special educational needs. A plethora of policy exists to insure the inclusion of young people with disabilities in education. The education system is responsible for enhancing the achievements of students with disabilities through accommodating their individual learning needs (Rose, Shevlin, Winter and O'Raw, 2010; Watson and Nolan, 2011).

Article 42 of the Irish Constitution guarantees equal educational rights to all children and no child may be excluded from full-time appropriate education by virtue of their disability (Bunreacht na hEireann, 1937). Following this, legislation was introduced to provide for the inclusion and accommodation for young people with special educational needs in education. The Disability Act (2005) provides a definition of disability as;

“a substantial restriction in the capacity of the person to carry on a profession, business or occupation in the State or to participate in social or cultural life in the State by reason of an enduring physical, sensory, mental health or intellectual impairment” (Government of Ireland, 2005).

The Education Act (1998) stated the need for equality of access and participation in education (Government of Ireland, 1998). It was established as an act to make provision for every person in the state including any person with a disability or who has any other special educational needs. The Education for Persons with Special Educational Needs Act, (2004) (EPSEN Act 2004) highlighted that;

“the education of people with special educational needs shall, wherever possible, take place in an inclusive environment with those who do not have such needs and to assist children with special educational needs to leave school with the skills necessary to live independent and fulfilled lives” (Government of Ireland, 2004).

However, this act has not been fully implemented. The act enforces a statutory obligation for the provision of Individual Educational Plans (IEPs) for students with disabilities, at primary and secondary level but this has yet to be instigated. McGuckin, Shevlin, Bell and Devecchi (2013) declared that this has hindered the process for planning the transition to higher education. Section 8 of the Disability Act (2005) places an obligation on third level institutions to conduct assessments of need and provide an outline of supports to address the needs of students with disabilities in the assessment (Government of Ireland, 2005).

The Association for Higher Education Access and Disability (AHEAD) was established to provide guidance and supports for parents, educational staff and young people accessing higher education (AHEAD, 2018). In 1994, the Fund for Students with Disabilities was provided by the Higher Education Authority in conjunction with the European Social Fund. Its purpose is the provision of services and equipment for students with disabilities to enable them to access participate and complete their course of study (Higher Education Authority, 2005). Unfortunately, a limitation of this funding is that it is not provided for students with disabilities in part-time education (Higher Education Authority, 2017).

2.3 The participation rates of students with visual impairments entering third level education

It is recognised that young people with disabilities have fewer opportunities to participate in higher education than their peers who do not have disabilities (Higher

Education Authority, 2015; Getzel, 2005). The Central Statistics Office (CSO) in 2006 compiled the first census on people with disabilities in Ireland. However, in this census, data of people with both hearing and visual impairments was combined into one section and characterised as 'sensory disability' (Central Statistics Office, 2006). This provides little assistance for analysing data or tracking the progress of people with visual impairments.

Shaw, Brain, Bridger, Foreman and Reid (2007) advises the recent implementation of access strategies to higher education have been instrumental in widening the participation rates of students with disabilities. The Disability Access Route to Education (DARE) is an alternative admissions strategy increasing the accessibility of higher education for students with disabilities in Ireland. The number of students with visual impairments that applied through the DARE scheme has grown from 36 in 2010, to 43 in 2011, to 48 in 2012. In 2010, the target set by the Higher Education Authority (HEA) to increase the number of students with vision impairments attending higher education to 98 was exceeded as 116 were recorded to be participating in third level education (Disability Advisors Working Network, 2012). A report compiled by the Association of Higher Education Access and Disability (AHEAD) (2015) revealed that the number of students with visual impairments in third level education amounted to 2.4% of the population of students with disabilities attending higher education during the academic year of 2013/2014. It highlighted this as a 0.3% increase from the previous year. Of the 2576 new entrants with disabilities to undergraduate courses during this year, 2.5% had visual impairments.

Conversely, another report conducted by the AHEAD during the academic year of 2015/16 discovered that while the participation rates of students with disabilities has increased by 4% year on year, the numbers of students with visual impairments in higher education has decreased by 10% in the academic year of 2015/2016. The report verified that 11244 students with disabilities attended third level education during this year. It recorded 205 students with visual impairments in higher education, amounting to 1.8% of the population of students with disabilities in higher education. The number of new entrants with disabilities amounted to 3075. 50 (1.9%) of these students had a visual impairment. The report states in the past five years the growth of students with visual impairments in higher education has been three

times slower than that of the general population of students with disabilities (AHEAD, 2017). The National Plan for Equity of Access to Higher Education 2008–2013 also acknowledged that the participation rates of students in third level education has risen generally, while the participation rates among students with sensory impairments persists to be low (Higher Education Authority, 2008). The participation of students with disabilities in Part-time education is at 1%, indicating that they are very under-represented (AHEAD, 2015). This contrasts with findings from the National Longitudinal Transitional Study 2 in the USA that identified, '*Youth with visual or hearing impairments were more likely to attend postsecondary school than were those in several other disability categories*' (Newman, Wagner, Cameto, Knokey and Shaver, 2010). Therefore, this current study plays a vital role examining the experiences of students with visual impairments transitioning to third level education in order to gain a greater understanding of why Ireland has experienced little growth in the participation of students with visual impairments in higher education.

2.4 Supports available for students with visual impairments transitioning to third level education

There are a range of supports available to students with visual impairments in education. In Second level education students receive supports for their individual needs identified by an assessment conducted by a visiting teacher for visually impaired children. Supports received by students with visual impairments include access to a visiting teacher, assistive technology, Special Needs Assistants, large print or braille format books and materials, and examination accommodations (Murphy, McCarthy, Shevlin and Heelan, 2014). O'Grady (2013) found that second level students with visual impairments valued assistive technology, alternative print formats and examination accommodations as most helpful supports.

2.4.1 DARE

The Disability Route to Education (DARE) was initiated in 2009. This scheme allows third level institutions to offer places to Leaving Certificate students with disabilities on a reduced points basis (DARE, 2018). Padden and Tonge (2017) states that the DARE scheme has been successful in increasing the numbers of young people with disabilities who transition to third level education. Over the period of 2010 to 2016,

the rate of students eligible for DARE increased by over 200%. In 2010 the number of applicants under the category of blind/visually impaired amounted to 26, 2% of the total population of students with disabilities. By 2016 this number increased to 50 (1.2%) students with visual impairments applying to DARE (Nic Fhlannchadha, 2017). While this trend is encouraging, Padden and Tonge (2017) caution that more work needs to be done to ensure that students with sensory disabilities are gaining access to higher education.

2.4.2 Disability Support Services

In accordance with the Disability Act (2005) a needs assessment is conducted with students as they enter their third level institution. The aim of a needs assessment is to identify distinct needs and implement supports that will allow students with disabilities to participate fully in third level education. In third level education students receive similar supports to second level such as assistive technology, examination accommodations, a Note Taker/Academic Assistant or Personal Assistant, large print, braille or audio learning materials. Research identifies that it is essential to recognise that individuals with visual impairments have unique needs and that the supports they require vary depending on their requirements and circumstances (Dale, 2010; Douglas, McCall, McLinden, Pavey, Ware and Farrell, 2009).

Disability support services in third level institutions are central in providing supports to promote and enhance all aspects of higher education (McCarty and Quirke, 2017). In 2009, there was at least one full-time or part-time staff member employed to manage disability supports and accommodations in all third level institutions across Ireland (Higher Education Authority, 2010). The Disability Officer works exclusively to ensure that students with disabilities are seamlessly integrated into the third level environment. Their role is to manage cases, plan and act as a manager of services. They are a source of information and act as an advocate for students with disabilities (McCarty and Quirke, 2017). They also insure the adequate provision of reasonable accommodations. These are intended to *'facilitate equality of participation in the education system for these persons and to insure that they achieve appropriate learning outcomes'* (Kinsella and Senior, 2008, p. 63). When entering third level education students may be afforded tailored inductions by disability support services in institutes. This has proven beneficial for students with visual impairments and is provided to many students in other states such as Birmingham (Hewett et al. 2015).

However, it is often not practiced due to a lack of funding (AHEAD, 2008). Another support made available through disability support services in higher education is assistive technology.

2.4.3 Assistive Technology

Assistive technology plays a significant role in assisting students with visual impairments in education (Palmer, 2005; Evans, and Douglas, 2008). It promotes academic engagement and affords the student flexibility in their learning environment. Assistive technology can be defined as;

“any item, piece of equipment or product system that may be used by a person with a disability to preform specific tasks, improve functional capabilities and become more independent. It can help redefine what is possible for people with a wide range of cognitive, physical or sensory disabilities” (Higher Education Authority, 2015).

It has been noted that there is a clear difference between technology and assistive technology. Technology in general makes tasks easier for everybody whilst assistive technology makes tasks possible for individuals with disabilities (Asselin, 2014 p. 223). Benavente, E, (2015) articulated;

“with the use of assistive technologies, people with visual impairments not only have the opportunity to be independent at home, school, university and work but also to “compete successfully with sighted people and to have equal access to printed information” (Abner and Lahm, 2002, p. 98).

Students with visual impairments avail of a range of assistive technology devices to support their participation in education. Closed Circuit Televisions (CCTVs) are often used by people with visual impairments. These devices contain a built in camera which magnifies objects and displays it enlarged on a screen in order for a visually impaired person to see. CCTVs are available in a wide range of sizes and types depending on their purpose (Lawler, 2016). Some can be connected to a laptop or television while others are portable. Portable assistive technology allows movement for a student and supports their individual learning needs in a range of different environments (Day and Edwards, 1996; Raskind and Higgins, 1998; Forgrave 2002; Kukulska-Hulme, Evans and Traxler, 2005).

Screen magnification software and screen readers are regularly used by people with visual impairments to access computers. Screen magnification software such as SuperNova or ZoomText enlarge the text and images on the computer screen, change colour and contrast of the screen, adapt the colour and size of the mouse pointer and allows the user to control the amount of the screen that is magnified. It also contains a speech option which reads text on screen aloud (Lawler, 2016).

Talking word processors such as Read and Write Gold by Texthelp™ has proven advantageous for students with visual impairments. Texthelp™ is a software that uses synthetic speech to read text aloud while highlighting the text on a computer screen. This may support spelling and composition for students with visual impairments. The software reads out words while they are typed allowing for the recognition of inaccurate spelling. It can also be used to read word documents and previously typed text. Moreover, features allowing for the adaptation of text size, colour, background colour and text highlighting may benefit students with visual impairments (Hasselbring, and Bausch, 2005; Mulloy, Gevarter, Hopkins, Sutherland and Ramdoss, 2014). It is important to note however; the successful provision of assistive technology involves having regard for the individual preferences of the user (Scott, 1997).

2.4.4 Access to alternative print formats

The use of print material is an intrinsic component of participating in education. Therefore, the ability to access this material is imperative for enabling students with visual impairments in education (AHEAD, 2014). Students with visual impairments must receive appropriate books and materials to gain equal access to the curriculum (Harpur and Loudoun, 2011). Many people with visual impairments access print material through large print, audio or braille formats. In Ireland, large print and braille books are mainly produced by the National Braille Production Centre (NBPC). It is argued that learning braille is vital for students with visual impairments (AHEAD, 2008). However, the use of braille has reduced in recent times, mainly due to advancements in technology, expense and time consumption of braille production (AHEAD, 2014).

2.4.5 Examination accommodations

The procedure of standard examinations can be particularly challenging for students with visual impairments. This hinders their ability to accurately demonstrate their level of knowledge in examinations (Douglas, McLinden, McCall, Pavey, Ware and Farrell, 2011). Therefore, Reasonable Accommodations are needed to provide students with visual impairments the opportunity to perform on an equal level with their peers (Kinsella and Senior, 2008). The most commonly utilised examination supports are extra time and adapted examination papers (Hewett, Keil and Douglas, 2015).

This study intends to discover what supports students with visual impairments avail of when transitioning to third level education and if they are perceived to be helpful. Gaining this knowledge is imperative to enhance supports provided to students when embarking on this transition.

2.5 The challenges experienced by students with visual impairments entering third level education

As highlighted by Kelley, Sanspree and Davidson (2000) people with visual impairments epitomise a diverse group of individuals with differing needs, aetiologies and abilities. Students with visual impairments experience many challenges. Not only do they face the usual life challenges associated with their age and stage of development, but they also have to overcome obstacles associated with their visual impairment (Gold, Shaw and Wolffe, 2010). Factors such as adapting to a new environment, creating a new network of supports to meet their needs is a common challenge experienced by students with visual impairments when transitioning from second to third level education (Erin and Wolffe, 1999; Schneider, 2001). Wehman (2006) defines transition as; *“the life changes, adjustments and cumulative experiences that occur in the lives of young adults as they move from school environments to independent living and work environments”* (p. 4).

In second level education students with visual impairments receive supports through specialised staff who take on the responsibility of providing these supports. In tertiary education, students with visual impairments must assume more responsibility in becoming their own advocates and gaining access to supports and course materials (Erin and Wolffe, 1999; Kochhar-Bryant, Bassett and Webb, 2009). Students with

visual impairments encounter many environmental and attitudinal barriers when transitioning to third level education (Cole-Hamilton and Vale, 2000; Hutchinson, Atkinson and Orpwood, 1998; Simkiss, Garner and Dryden, 1998).

2.5.1 Accessible learning material

The process of converting materials into accessible formats is time consuming (Harris and Oppenheim, 2003; Lewin-Jones and Hodgson, 2004). Difficulties obtaining books and handouts in accessible formats is frequently experienced by students with visual impairments (Benavente, 2015; Cole-Hamilton and Vale, 2000).

AHEAD (2008) argue that there is inadequate provision of accessible books and materials in higher education. In a study conducted in Greece by Athanasios, Konstantinos, Doxa and Eleni (2009) many participants expressed that library books were rarely available in accessible formats. They were usually in printed form while many students expressed a preference for braille, large print or audio.

2.5.2 Physical environment

A study conducted by Reed and Curtis (2012) examined the experiences of students with visual impairments in Canadian higher education. Over half of the students interviewed stressed that reading was one of the main difficulties they contend with. Students explained that it takes them a significantly longer time to read than other students. Furthermore, 60% of students, both blind and visually impaired disclosed that they often suffer from headaches and eye strain due to reading, inappropriate lighting, and using computers. Students also stated that the learning environment may hinder their participation in education. Additionally, students found other aspects of the environment challenging such as, lighting, signage, distance from the lecturer and using assistive technology during class. Moreover, note taking and viewing power point slides were common difficulties highlighted by students with visual impairments (Athanasios et al. 2009). Improperly scanned PDF files was another difficulty highlighted by Perez (2013) leaving documents unreadable for students with visual impairments.

2.5.3 Navigation

Mobility is a significant aspect of all people's lives. Navigation can be particularly difficult for people with visual impairments (Hewett et al. 2015). It is not feasible for a person with a visual impairment to gain independence if they are unable to navigate and travel freely (Jacobson, 1993). It is therefore imperative that students with visual impairments are afforded mobility and orientation training when transitioning to higher education (Hewett et al. 2015).

2.5.4 Unsuitable assistive technology

Assistive technology devices can only be effective when they are matched to the distinct needs of the individual. It is vital to consider individual preferences when providing assistive technology, otherwise it will not be used (Scott, 1997). It has become evident in research that assistive technology is likely to be underutilised or abandoned if it does not fully address the needs of the individual (Cook 1982; Zola 1982). Philips and Zhao (1993) uncovered that a disregard for the preferences of the user was a major factor leading to the abandonment of assistive technology. Other reasons for assistive technology being abandoned included difficulties using devices, poor or unreliable devices performance, change in the needs and abilities of users and environmental barriers (Giltin, 1995; Phillips, 1993; Rogers and Holm, 1992).

2.5.5 Lack of understanding

In Reed and Curtis's (2012) study, 23% of staff and 34% of students interviewed believed that raising awareness around visual impairments would reduce some barriers. A study conducted by AHEAD in 2008 highlighted attitudinal challenges faced by students with visual impairments involving negative perceptions and low expectations of professionals. The study conducted by Athanasios et al. (2009) also identified attitudes of staff, for example, lecturers disallowing the recording of lectures as challenging.

The desire to 'fit in' may often have an impact on young people's engagement with supports provided to them (Byrne, 2014; Hemmingsson Lidström and Nygård, 2009). Byrne (2014) discovered that students with visual impairments stated that they felt 'out of place' due to the visibility of their impairment or supports they used.

2.6 The successes experienced by students with visual impairments entering third level education

It has been uncovered that many students with visual impairments consider themselves to have had a positive experience transitioning to third level education, stating that the process was 'easy' (Athanasios et al. 2009). Students felt that their teachers, social environment and family were motivating factors. In a study conducted by Byrne (2014), some students articulated that they were 'genuinely impressed' with the level of support provided to them.

2.6.1 Disability Support Service

Students with disabilities have the capacity to reach their full potential and be just as successful as students without disabilities when provided with adequate interventions by disability support services (Sahin and Yorek, 2009; Wessel, Jones, Markle and Westfall, 2009). The provision of disability support services in higher education has been central to the increase of students with disabilities perusing higher education (Yssel, Pak and Beilke, 2016). The role of staff in disability support services involves advocating and working on behalf of students with disabilities to provide appropriate supports to facilitate their participation and integration into third level education (Wessel et al. 2009).

2.6.2 Lecture Support

As lecturers are the course providers they play a central role in the education of students. Research found that students with visual impairments experience positive collaboration with academic staff (Athanasios et al. 2009). However, in a study by Reed and Curtis (2012) students disclosed that occasionally lecturers would forget to accommodate them.

2.6.3 Peer Support

Kef and Deković (2004) suggest that peer support has a greater impact on the well-being of young people with visual impairments compared to that of young people without visual impairments. Many people with visual impairments claim that they experience positive social interaction and build good relationships with peers (Athanasios et al. 2009). A study conducted by Perez in 2013 outlined that peer support was considered a main contributor to success for students with visual impairments.

2.6.4 Self Determination

Research highlights that self-determination has been identified as a significant component in successful outcomes for students with visual impairments. Self-determination can be defined as;

“combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behaviour. An understanding of one’s strengths and limitations together with a belief in oneself as capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the role of successful adults in our society” (Field, Martin, Miller, Ward, and Wehmeyer, 1998, p. 2).

Literature has highlighted that self-determination has significant implications on the quality of lives of people with visual impairments and other disabilities (Lachapelle, Wehmeyer, Haelewyck, Courbois, Keith, Schalock, Verdugo, and Walsh, 2005; McDougall, Evans and Baldwin, 2010; Wehmeyer and Schalock, 2001). Self-determination enhances the academic performance of young people with disabilities and makes them become actively involved in their transition to higher level education. (Fowler, Konrad, Walker, Test, and Wood, 2007; Test, Mason, Hughes, Konrad, Neale and Wood 2004).

According to McCarthy’s (2015) students with visual impairments demonstrate resilience and determination when faced with challenges accessing the curriculum. Determination to achieve successful academic outcomes enable them to persist in achieving their goals even when overcoming obstacles.

2.6.5 Self-Advocacy

According to Field (1996) the concept of self-advocacy is closely related to self-determination. Self-advocacy may be defined as ‘an individual's ability to effectively communicate, convey, negotiate, or assert his or her interests, desires, needs, and rights’ (Van Reusen, Bas, Schumaker, and Desbler, 1994).

Hewett, Keil and Douglas (2018) and Byrne (2014) highlights the importance of students with disabilities being able to self-advocate when negotiating supports and highlighting barriers in their learning environment. According to Reed and Curtis

(2012) in their examination of the experience of students with visual impairments, a lack of self-advocacy skills contributed to a lack of confidence.

As highlighted in the introduction, a scarcity of research exists on the experiences of students with visual impairments transitioning to third level education in Ireland. Present research primarily focuses on the transition of students from a second level perspective. This study is important as it adds to the insufficient body of literature and addresses the need for a third level perspective.

2.7 Participants' views on what can be done to promote the participation of students with visual impairments in higher education.

Many studies highlight the experience of students with visual impairments and provide recommendations accordingly. However, relatively little research identifies what students with visual impairments themselves recommend could be done to promote the participation of students with visual impairments in third level education. In one study conducted by Hewett et al. (2015) participants provided recommendations for higher level instructions on how to best support students with visual impairments living in campus accommodation. The primary recommendations included ensuring equipment such as kitchen appliances, buildings and the physical environment are accessible for students with visual impairments. This study fills a hiatus in research by ascertaining participants' own views on how to promote the participation of students with visual impairments in higher education.

2.8 Conclusion

This section has provided an account of existing literature regarding the transition of students with visual impairments to third level education. Policy providing for the inclusion of students with visual impairments in education was outlined. It highlighted that student's needs are assessed and individualised supports afforded to students with visual impairments transitioning to third level education, such as assistive technology and accessible learning material, assistants and examination accommodations. A review of literature regarding the challenges and successes

encountered by students with visual impairments was provided. The next section will describe the methodology used to conduct this research.

3.0 Methodology

3.1 Introduction

The aim of this section is to provide an account of the methodology used in this research project. It discusses the methods that were considered for conducting this study and the chosen method will become evident. The rationale for making this decision is highlighted. This section provides details on the sample that participated in the research. It goes on to outline the procedure undertaken for conducting the research. Any ethical issues and limitations of the study are taken into consideration. Finally, this section discusses how the data collected in the research is analysed.

3.2 The Research Question

This study aims to explore the challenges and opportunities/successes for students with visual impairments transitioning into third level education. The objectives of this study are:

- To investigate the supports available for students with visual impairments transitioning to third level education.
- To explore the challenges experienced by students with visual impairments entering third level education.
- To explore the successes experienced by students with visual impairments entering third level education.
- To enquire about participants' views on what can be done to promote the participation of students with visual impairments in higher education.

3.3 Research Design

Both a quantitative and qualitative approach were considered for the methodology of this research. A quantitative method *“provides a quantitative or numeric description of trends, attitudes or opinions of a population by studying a sample of that population”* (Creswell, 2003 p.153). This type of research is generally carried out by means of surveys or questionnaires (Groves, Fowler, Couper, Lepkowski, Singer and Tourangeau, 2009). For example, if the aim of the research is to uncover the number of classroom assistants that are employed in a country and the amount of

hours they work, a quantitative survey approach would be adopted. This approach is based on a positivist paradigm (Burgess, Sieminski, and Arthur, 2006). Marshall and Rossman (2006) indicate that questionnaires or surveys are seldom useful for investigating beliefs and values. They are not advantageous for exploring social relationships or interactions.

Qualitative research on the other hand, generally aims to understand peoples' experiences and attitudes. It seeks to understand social life through the study of targeted populations. It gains an understanding of peoples' attitudes, behaviours and interactions in everyday life (Graziano, and Raulin, 2007). Not only does qualitative research allow us to gain an insight to a person's point of view but it also grants this point of view the '*culturally honoured status of reality*' (Silverman, 2004; 2011).

The main methods of collecting qualitative data include open-ended interviews, observations or open ended written documents, such as diaries or open-ended questions in surveys (Patton, 1987 p. 7). A qualitative approach may be taken, for example, if a researcher wishes to gain an understanding as to how classroom assistants in a school cope with high workloads and the various tasks assigned to them, therefore adopting an interpretive paradigm (Burgess et al, 2006). Qualitative research collects and works with non-numerical data generating words instead of numbers and percentages as data analysis (Flick, 2014; McCusker and Gunaydin, 2015). Rossman and Rallis (2003) maintain that qualitative research is 'pragmatic, interpretive and grounded in the lived experiences of people'. For this reason, a qualitative approach was chosen for this study. It seemed the most appropriate method for examining student's perceptions of their experience of transitioning to third level education.

Methods of qualitative research include focus groups and interviews. Focus groups often involve interviewing small groups, usually ranging in number from 4 to 12 who are unfamiliar with one another and have been selected because they share certain characteristics relevant to the research question. It involves asking focused questions to encourage discussion and the expression of differing opinions and points of view in a supportive environment (Marshall and Rossman, 2006). Focus groups can be beneficial for conducting research with children or people who may not be literate (Stewart, Shamdasani, and Rook, 2007). However, interpersonal and

power dynamics may be an issue which the researcher must be aware of when conducting focus groups. Focus groups can often be time consuming and it may be difficult to assemble a group. Also, conducting focus groups may be logistically challenging while managing the conversation and collecting high quality data (Marshall and Rossman, 2006).

Semi-structured interviews are a commonly used tool when conducting qualitative research. Semi-structured interviews involves *'asking a series of structured questions and then probing more deeply with open-form questions to obtain additional information'* (Gall, Gall and Borg, 2007, p. 246). It could be argued that the semi-structured interview is the most significant way of conducting interviews on account of its flexibility, yet it is still balanced by structure and achieves a high quality of extensive data (Gillham, 2005). Gillham (2005) states that a major benefit of conducting a semi-structured interview is that it *'facilitates a strong element of discovery while it's structured focus allows an analysis in terms of commonalities'*.

Therefore, because of this, and giving the personal/sensitive nature of the research topic, semi structured, open interviews were considered most appropriate as a qualitative method for this study rather than focus groups.

3.4 Participants

A method of non-probability, purposive sampling was utilised for the selection of subjects for this study. This method did not involve random selection as the researcher was interested in a specific population. As the researcher intended on examining the transition experiences to third level education for people with visual impairments, the sample population had to meet the criteria of being a person with a vision impairment who had transitioned to third level education.

Five people with visual impairments were interviewed. All interviewees were over the age of eighteen and had previously embarked on the transition to third level education. All participants who volunteered to take part were female. Participants were at different stages of their education. All participants have received an official diagnosis of their visual impairment and all participants had varying degrees of vision. All participants had some level of vision. Participant one was in her third year of her undergraduate degree and had transitioned to third level straight from secondary school. This participant obtained her visual impairment later in life and

was mainly impacted by light sensitivity. Participant two had recently graduated from her undergraduate degree and was now working. She also had transitioned directly from second level education. She had a moderate visual impairment with light sensitivity since birth. Participant three was completing the third year of her undergraduate course. She completed a Post Leaving Certificate Course before entering her current higher level institution. She had a progressive visual impairment which deteriorates over time. Participant four had recently qualified from her undergraduate degree and was now working. She too transitioned directly from secondary to tertiary education. Her visual impairment is also progressive. Finally, participant five was in the first year of her undergraduate degree after transition directly from secondary school. This participant had a visual difficulty from birth.

3.5 Materials

When recruiting participants for the study an email was sent to the National Council for the Blind (NCBI) and disability services in various third level institutions to act as a gatekeeper. The email provided a brief explanation of the study and requested for the information to be passed on to any potential participants (see appendix 1).

Before conducting the interviews participants were provided with an information letter and consent form (see appendix 3 and 4). The information letter further informed participants about the procedure involved in the research process. The consent form requested written consent from participants for partaking in the interview and consent for the interview to be recorded.

An interview schedule was drafted outlining the main questions and topics for discussion (see appendix 2). This acted as a guide to direct the conversation and prevent it from wavering away from the relevant topic.

A Dictaphone was used for the recording of interviews. All participants agreed to recording the interview when signing the consent form. Additionally, observations of non-verbal cues were made by the researcher. The purpose of this was to ensure that participants felt comfortable while also adding to the quality of the data collected.

3.6 Procedure

In order to gain an insight into the experiences of the transition to third level education for young people with visual impairments, the researcher facilitated five semi-structured interviews with people with visual impairments who have embarked on the transition to third level education.

A research proposal and interview schedule were first drafted and approved by the ethics committee before instigating the research. Participants were recruited through the disability support services of various colleges and NCBI. Five people responded volunteering to take part in the interview and share their experiences. They were provided with an information letter and consent form in a format that was accessible to them. Participants were contacted via phone or email and arrangements were made to conduct the interview at the convenience of the participant. Some participants requested a copy of the interview schedule before the interview and this was provided. Each semi-structured interview took place in a destination chosen by the participant. On conducting the interview, the participant was reminded about confidentiality, anonymity and their right to withdraw from the process at any time. A consent form was signed by the participant. Each interview lasted approximately fifteen minutes.

After the interview, all recorded data was transcribed verbatim as consented to by participants. All data was stored safely in numerical order as to protect anonymity. It was then destroyed after the specified timeframe. Data was analysed using thematic analysis. This data was then compared and contrasted with the aims, objectives and previous literature highlighted in this study.

3.7 Ethical Considerations

Over time ethics has become increasingly important when conducting research (Bell, 2005). Informed consent must be obtained from interviewees for research to be ethical. Informed consent encompasses clarity about the nature of the study and establishing and keeping agreements as to how data will be used and represented in the study (Blaxter, Hughs and Tight, 2001). Hart and Bond (1995) describe procedures which should be taken by a researcher to ensure a participant is fully informed about the research and realise their own rights. These require the

researcher to verbally inform the participant that participation is voluntary and that they are free to withdraw at any time during the study. It is imperative for all researchers to obtain informed consent from participants. This involves a clear explanation of the nature of the study before commencing the interview (Gray 2000 cited in Bell and Opie 2002; Oliver 2003). Bowling (2002) indicates that in addition to ensuring participants understand what the research entails, the informed consent procedure 'reduces the legal liability of the researcher'.

All participants were over the age of eighteen. Therefore, consent did not need to be obtained from the parents of participants to take part in the study. All participants were provided with an information sheet fully informing them about the process involved in the study and what would be expected of them. All participants were ensured that their identity would remain anonymous and that their data would be treated with strict confidentiality. All participants were provided with a consent form and signed this form consenting to the interview process. Considering that participants have visual impairments, all documents were provided in large print, soft and hard copy formats, depending on the individual needs of the participant. This ensured that participants were able to access documents to give full, free and informed consent. Furthermore, each participant was given a verbal explanation about the study and personally reassured by the researcher about issues of confidentiality and anonymity before conducting the interviews as well as in the information sheet and consent form provided. This was important as reading may be difficult or uncomfortable for a person with a visual impairment.

It was not expected that the questions would cause undue distress. During the interview process the researcher paid attention to how the participant was coping with the interview, to ensure they did not become uncomfortable discussing a particular topic. If a participant became uncomfortable, the researcher would reassure the participant that they did not have to answer anything if they did not wish. The question would be skipped or the interview would be stopped. However, this issue did not arise.

3.8 Limitations

The small scale of this research needs to be taken into consideration. Interviews were conducted with five people with visual impairments. This may not be fully representative of the experiences of all people with visual impairments who have embarked on the transition to third level education. More themes could possibly emerge from a larger group sample leading to different findings. To gain a greater insight to the transition experiences of people with visual impairments, a larger scale or longitudinal study may be beneficial.

Also, in this study all participants who volunteered to take part in the research were female. Therefore, this study is not fully representative of the experiences of males with visual impairments who have transitioned to third level education. Furthermore, all participants who volunteered to be interviewed had attended the same higher level institution. Consequently, this may not be representative of people with visual impairments who transitioned to other third level institutions.

3.9 Method of Data Analysis

Data collected from interviews and other forms of qualitative research characteristically take the form of a large body of text which is unstructured (Bryman, 2004).

Creswell's (2009) data analysis framework was used as a guide to analyse data obtained from the semi-structured interviews. In order to analyse these findings each recorded interview was transcribed verbatim into a Microsoft Word document. Once transcribed, data from all interviews was organised in correlation to questions asked in the interview schedule. These transcripts were reread to gain an insight to the tone and depth of information provided. A method of thematic analysis was employed to uncover re-occurring themes which emerged from the data collected. A method of coding was conducted to uncover these themes. In doing this substantial quotes, statements or words were colour coded and cross analysed between all transcripts. This allowed re-occurring patterns to emerge from the data. According to Boyatzis (1998) thematic analysis allows the researcher to delve deeper into the data. This creates a greater understanding and appreciation of the information obtained through interviewing participants.

3.10 Conclusion

This section outlined the method used to collect and analyse the research data of this study. Furthermore, it described the participants of the study and any materials used. It also delineated the procedure, ethical considerations and limitations of the study. The following section will present the themes that emerged from the semi-structured interviews conducted.

4.0 Results

4.1 Introduction

This section presents the findings from semi-structured interviews conducted with five people who have visual impairments. The interviews explored the experiences of people with visual impairments transitioning to third level education. It gained an insight on, the supports they received and challenges they endured as well as the successes they experienced. The interviews also investigated the participants' recommendations regarding positive changes that could be implemented to promote the engagement of students with visual impairments in third level education.

Interviews lasted between fifteen and eighteen minutes. For the purpose of presenting the results, all participants are randomly labelled by number to protect anonymity. The data collected was analysed using thematic analysis. The following themes emerged from the data;

Objectives	Themes
To investigate the supports available for students with visual impairments transitioning to third level education.	Disability Access Route to Education Disability Support Services Assistive Technology Examination accommodations
To explore the challenges experienced by students with visual impairments entering third level education.	Accessible learning material Physical environment Navigation Unsuitable Assistive Technology Lack of understanding
To explore the successes experienced by students with visual impairments entering third level education.	Disability Support Services Lecturer support Peer support Self-determination Self-advocacy
To ascertain participants' views on what can be done to promote the participation of students with visual impairments in higher education.	Tailored inductions Attending assistive technology trade fairs

4.2 Supports available for students with visual impairments transitioning to third level education.

Participants were asked about the supports they received when transitioning to third level education. Supports included, DARE as an alternative entry route to higher education, Disability Support Services in third level institutions, assistive technology and exam accommodations.

4.2.1 Disability Access Route to Education

All participants were aware of entry routes to third level education, including the DARE scheme. Variations occurred regarding participant's entry to third level through the DARE scheme.

Two participants entered third level education through the DARE scheme. One participant applied to DARE but did not qualify as she did not meet criteria, even though she needed and received supports in second and third level education. This participant stated;

"I applied for the DARE system coming from second to third level education but I didn't qualify under medical means. I think it was because technically my eyesight wasn't bad enough. So when I came into third level education I made it known straight away that I would need like extra assistive technology support".

(Participant 2)

One participant applied to DARE but did not avail of this route to third level as she undertook a Post Leaving Certificate course, *'I had applied for DARE but with the PLC college all my paperwork was transferred from secondary school to the business college and to [present college] as well'*. (Participant 3) One participant did not make an application to DARE as she had yet to receive a diagnosis.

4.2.2 Disability Support Staff

All participants received supports when they transitioned from second level to third level education. The supports provided varied depending on the individual needs of the person. A needs assessment was conducted with all participants when they commenced third level education. This assessment identified the individual requirements of each student and implemented supports required. Participant 4 acknowledged specific staff members she worked with directly *'It was mostly the*

Assistive Technology Technician. He always had new ideas and different things to try out. The Disability Support Officer helped out with organising extra supports for exams like extra time, reader and scribe and massive help'. Additionally, participant 2 also articulated that *'any time I needed anything I could just go down to [Assistive Technology Technician] in the disability lab and he could get me whatever I needed'*. (Participant 4)

Two participants received an academic assistant/personal assistant. The main role of this person for both participants was to take notes in class. In addition to this, one participant disclosed that her Personal Assistant helped her with other daily tasks such as ordering food in the canteen.

4.2.3 Assistive Technology

All participants identified assistive technology and access to the Assistive Technology Centre as key to supporting their transition. In this centre they were able to avail of a range of assistive technology, large screen or adapted computers, magnification software and screen readers. Participant three availed of *'magnification software that is on a memory stick and then it's fully installed onto the PC in the assistive technology room'*. Four participants received laptops which were adapted to their individual needs with assistive technology software installed. Participant one stated *'I got two computers that were adapted. The brightness was adapted. There was Texthelp™ on them'*. Four participants received SuperNova magnification software. This software was provided on a USB stick allowing it to be used universally. All participants received different assistive technology devices based on their distinct requirements. Participant 3 availed of a tablet to use as a large print calculator along with a portable CCTV magnifier. Participant 2 received *'an iPad and then a camera for the back of the iPad for it to be able to zoom in and out of the boards in each of the classes'*. Participant five received a recording pen for taking notes and recording lectures.

Participant two noted the benefits of accessing the Assistive Technology Centre *'the disability lab was great because they have the blinds closed all the time so it's not as harsh on your eyes and you can sit and work'*. Participant 1 uncovered the social benefits of accessing the assistive technology centre. She enjoyed accessing this centre as it afforded her the opportunity to become familiar with people in similar

circumstances. She explained *'It can be the best craic because you're interacting with people who have the same problem as you and you can talk to them about it and that's one of the best parts about it'*.

4.2.4 Examination supports

All participants were offered individualised exam accommodations. One participant opted to not avail of these examination accommodations in her first year. However, the participant said she found this too difficult and decided to avail of these accommodations throughout the remainder of her undergraduate degree. She stated *'The first year I opted to do exams as normal in a normal college setting but I found it a bit too hard'*. All participants completed their examinations in a separate exam centre. This was indicated by participant 2 stating *'I got to do my exams in a separate room where the light was adjusted properly to my eyes'*. Additionally, four participants were provided with access to a scribe or reader while completing their examinations. Participant 3 revealed *'Exam wise I got a room to myself and I got a supervisor that could scribe or read the paper for me, depending on what I needed'*. One participant used Texthelp™ on the computer to read her exam paper to her. She also received large print, black and white exam papers. All participants were offered extra time to complete examinations. Participant 2; *'There was extra exam time allocated because obviously we have to read through it that bit more thoroughly'*. Participant 4 expressed that the exam accommodations helped her feel 'comfortable'. She expressed *'For exams I got a reader and scribe and I felt so comfortable in the exams'*. However, one participant did not have such positive experiences during exams. Participant 5 expressed that she had difficulties obtaining the supports she required during exams. She elaborated expressing;

"I've been into two exams where they didn't have the right answer booklet and one exam they didn't have Texthelp™ on the computers. We had to spend twenty-five minutes going around trying to figure out what room we were supposed to be in and that took time out of the exam and then you go into the exam and you're so anxious and slightly upset because you had to try and find stuff that should have been accommodated for but it wasn't". (Participant 5)

4.3 The challenges experienced by students with visual impairments when entering third level education.

Participants were asked to identify the challenges which they experienced when entering third level education. The main challenges identified by participants included accessible learning material, navigation and the physical environment of the higher level institution that they attended.

4.3.1 Accessible learning material

Provision of accessible learning material was highlighted as a challenge by two participants. Participant 5 encountered great difficulties receiving examination answer booklets in an accessible format;

“I went into my first exam I asked for black and white enlarged paper, no colours. They gave me pink paper. I can’t see anything with a red undertone. It’s very difficult and I could just see a blur all over the paper. I couldn’t differentiate anything. It took fifteen minutes to try and get something sorted and it didn’t happen. I had to end up doing my exam which was very difficult”. (Participant 5)

Participant one also encountered difficulty accessing PowerPoints and notes in an accessible format stating *“I needed more accessible formats, it would have been better I was given hard copies of the notes”.* (Participant 1)

4.3.2 Physical Environment

This study found that the physical environment of a third level institution may cause difficulties for students with visual impairments. The ability to view the classroom whiteboard and lighting were primary difficulties underlined by all participants.

The ability to see the classroom whiteboard:

Difficulties seeing the board in lecture rooms was highlighted as a common challenge for all participants. When asked what they found most challenging about their transition to third level education, participant 2 answered *‘I would probably just say in terms of just seeing the board’*. Participant 1 also expressed this as a major difficulty. She indicated *‘it was the interactive board. That was a big challenge, trying to take down notes from that board’*. Participant 5 also expressed difficulties sitting in long lectures focusing on the board;

“Sitting in two hour lectures weren’t great because with my eyes I could have great focus for half an hour and then my eyes spasm and I can get very bad headaches if my eyes are focusing so much. So it can be very difficult”. (Participant 5)

Lighting:

Lighting was another issue identified by four participants. Two participants are sensitive to bright light due to their eye conditions. Participant 1 articulated *‘the flicking, you know on the projectors’* made it problematic for her to take notes from the board. Areas of the college with bright lighting or rooms without adequate window blinds were problematic and uncomfortable for these participants. This became evident when participant 2 voiced *‘I found in some of the rooms the light was quite a challenge. With having light sensitive eyes, it really can be a struggle’*. Unsuitable lighting also had a negative impact hindering participants’ use of assistive technology. Participant 3 noted *‘with the projectors there can be light reflecting problems’* making it difficult to use assistive technology during lectures. Participant 5 illustrated difficulties viewing PowerPoint slides that contained colours which she was unable to see.

4.3.3 Navigation

Two participants highlighted navigation as a major difficulty while attending higher level education. Participant 4 emphasised that *‘one of the biggest challenges was navigating my way around the place’*. Participant 3 expressed, *‘I suppose the layout more than anything because it’s a new place, new campus, getting off and on a bus’*. This participant also expressed that *‘the high influx of people’* can make navigation difficult, *‘It’s just more so the volume of people in the one area can sometimes be challenging, or the canteen is still challenging for me’*. (Participant 3) Participant 3 pinpointed the challenges she experienced gaining access to the canteen. She revealed that *‘They [personal assistant] might get me food just because I actually can’t read the signs myself and it was so busy, that would be challenging enough’*. She also expressed, *‘I suppose it would’ve been nicer to be that bit more independent and get my own food but due to the high influx of people I don’t think that would change’*. (Participant 3)

4.3.4 Unsuitable Assistive Technology

While assistive technology has been identified as important support to participants, there were instances where it caused challenges. Participant 4 stated some were inconvenient or impractical to use and therefore will not use them *'Most things have been [helpful]'. However, some technologies can be inconvenient to use.*

Participant 3 explained;

"The magnifier, the only thing about the hand held one is you have to have it plugged in when you're using it and then the newer version of the Opti Verso.... it's not practical for me to bring around from lecture to lecture, just for the fact that it takes so long to set up and then when I have it up and running, depending on the lecturer room, like sometimes I can see it, more times I actually can't see it".

Moreover, participant 3 articulated that issues may arise when accessing computer programmes such as PowerPoint or Excel *'using assistive technology may often be problematic. SuperNova wouldn't be compatible with some of the other software so that was quite challenging. Even downloading lecture notes can be difficult too because SuperNova doesn't support PowerPoint sometimes'.*

Many participants explained that finding the right assistive technology is *'trial and error'* and that it can be a challenge testing different devices to uncover what works. One participant articulated *'I tried Texthelp™ but that didn't work for me'. (Participant 4)*

4.3.5 Lack of understanding

A common theme related to a lack of understanding from others with regard to the participants' visual impairment. One participant in particular encountered a lack of understanding from staff which they regarded as challenging. When addressing difficulties with lighting and viewing PowerPoints during lectures she revealed that

'Head of department can't really understand. He basically told me to sit at the back of the class and close my eyes which wasn't great in any way'. (Participant 1)

Another participant talked about comments made to her, however this did not upset her;

“Most people don’t really know that you have a visual impairment unless they see you trying to read something and they ask ‘why aren’t you wearing your glasses’ or ‘you should be wearing glasses’ or ‘you need to get glasses’. They just didn’t obviously understand. But I mean it’s more so not knowing than being ignorant. They probably just think you should get your eyes checked”. (Participant 2)

Participant 5 expressed some difficulty when explaining to lecturers about her visual impairment describing; *‘When you have to explain what nystagmus is with colour blindness tendencies they’re like what?’.*

Participant 3 disclosed that some lecturers lack of understanding of her visual impairment led to academic lower expectations for her compared to her classmates. She explained that lecturers would often make exceptions for her adapting the amount of work she was expected to complete. She described; *‘They [lecture] lessened the load for me so that it wouldn’t be expected of me to have as high a standard as everyone else’*

4.4 The successes experienced by students with visual impairments entering third level education.

Participants outlined four main components that resulted in successful outcomes when transitioning to third level education. These include the disability support service, lecturer support, peer support and the participants own self-determination. Furthermore, participants identified what they considered to be successful outcomes to them. These involved academic achievement, improved self-confidence and increased independence. Generally, participants found their overall experience of transitioning to third level as successful. When questioned with regard to what they found successful, participant 2 emphasised *‘All of it really. I couldn’t pin point one thing. I’m really happy with how well it actually went. It was a really good experience’.*

4.4.1 Disability Support Service

All participants identified that the supports they received were a major contributor to the success they experienced while transitioning and adjusting to third level education. Participants regarded staff providing disability supports in their third level institution as key people in assisting them to overcome challenges. Supporting this, participant 1 identified *‘The key people in the college would definitely be the disability*

office. They've been the key people to me'. This was reiterated by participant 1 stating 'The disability department here in [college name] is brilliant as well like, they're really approachable and you can talk to them about anything' and participant 5 'The disability office. If I had any questions they were great to talk to'.

Participant 2 stated "I don't think I would have actually made it through college if I didn't have the extra help" and participant 4 exclaimed 'Oh they were totally helpful'. Participant one also expressed that 'The disability office is absolutely brilliant'.

Participant 1 articulated 'The supports I got has were beyond good and that's probably the best thing. The disability office has been far the most critical importance in my life and that's what I'd say went well for me'. This was reinforced by participant 4 maintaining 'I suppose obviously the disability supports'.

Participant 2 identified assistive technology as being helpful in overcoming issues relating to seeing the whiteboard, 'Well with the camera I could see the board better'. Participant 4 explained that she overcome challenges by trying different technologies and identifying what worked best.

"I knew what worked and what didn't work and the stuff that didn't work got left out. The stuff that worked were the SuperNova pen, love that thing. We did other things. We switched out keyboards and other things like that. That were a massive help. That's how we overcame a lot of stuff". (Participant 4)

4.4.2 Lecturer Support

Support from lecturers was deemed to be vital by many participants. Participant 4 maintained 'Good support from lecturers and that's really important. That's a lot of the battle really because they're the training providers as such'. Participant 4 maintained 'I had no problem in getting lectures to read out the handouts instead of just handing them out and getting us to read them ourselves. We had a class discussion about everything'. This participant also talked about times when they asked lecturers in computer laboratories to adapt their teaching style to include them. She explicated;

"They weren't just showing you 'oh you go here or go there'. They actually took the time to explain what they did. So I really have a great deal of respect for the computer lecturers". (Participant 4)

In line with this, participant 2 highlighted lecturers as being a helpful support. She stated that some lecturers who also acted as head of her course would *'stay back after lecturers and ask me if I needed help'*. (Participant 2)

4.4.3 Peer Support

The importance of support from classmates and peers was a theme emphasised by all participants. When referring to factors that led to successful experiences participant 4 mentioned *'our class supported each other so once I got to know my class I was away with it'*. Classmates were highly regarded as key people who helped participants to overcome challenges. Participant 3 claimed *'Other students have been really good'*. Participant 4 also viewed friends as being important. *'friends have been a help too and you get to know your real friends when you've got something you can't control they'll have to be there for you'*. Participant 2 further elaborated on how her friends assisted her;

"I'd say the girls that were in my class. They were all really helpful. If we were in a class and my eyes were so tired that I couldn't concentrate on the board anymore they'd just let me take a break. I could go outside or do whatever and when I'd come back they'd have the notes written out for me big so that I could read it". (Participant 2)

Furthermore, participant 5 valued her friends as an integral support. She explained;

"Friends. They're really great. If I can't see the board and I'm trying to put a heading down for the recordings they write it down for me. If I'm walking down a corridor and see something and it's a poster they'll read it for me because it has a bright background and I can't see it". (Participant 5)

Participant 2 also elucidated that her friends contributed to her social integration in college life. She illustrated an example *'Maybe on nights out the girls will keep an extra eye out because I'd be looking over here and they'd be over in the other corner'*. All participants identified positive social interactions with peers. Participant 2 had a very positive experience, articulating;

"It was pretty good. I mean I don't really see much difference between visually impaired and non-visually impaired in terms of going out and stuff like that. There's no segregation just because you're visually impaired". (Participant 2)

However, one participant expressed that 'her vision made it difficult to approach people'. (Participant 4)

4.4.4 Self-determination

All Participants emphasised that each individual's self-determination and motivation was a major factor leading to success. Participant 1 pointed out that when overcoming challenges *'you have no other choice. Get on with it. Don't let things drag you down'*. This was further supported by participant 4 who maintained that a *'Slight bit of determination along with dedication and just want to make myself that bit more employable'* was a key element to success. Participant 2 further elaborated;

"Determination because being visually impaired I think we have this extra push that makes us want something and fight for something even more. I think there's a stronger sense of independence, you want to try to do it by yourself. I think you feel accomplishment in yourself knowing that you've gone through third level education with a vision impairment and you're like, I am just as good as a normal sighted person and I worked probably twice as hard to get where I am". (Participant 2)

4.4.5 Self-advocacy

The importance of self-advocacy emerged as a recurring theme among all participants in order to achieve positive outcomes. All participants emphasised the significance of making their voice heard and *'asking for the help they need'*. (Participant 5) Participant 1 advised *'Don't be afraid, talk to the disability staff. They're there for you, anything you need they'll give it to you'* and participant 5 also advised *'Seek as much support as you can'*. Participant 3 reiterated this by recommending *'You won't know the answer unless you ask. Somebody else could have queried the same thing so definitely ask questions'*. Participant 4 believed that it was important to communicate your impairment to lecturing staff *'It's better to go directly to the lecturer themselves so they know that exactly what is going on and how they can adapt to include you more in the class'*. All participants expressed how voicing their needs and seeking assistance made their transition to third level easier.

"Never be ashamed of asking for help. No one will ever look down on anybody for looking for help. Go in and make yourself known straight away to the disability lab or your lecturers or anybody of authority because it makes such a

difference. It makes college life so much easier if you just tell people I have a visual impairment. I may need help with this from time to time, and they're so helpful. It made such a difference". (Participant 2)

One participant highlighted the benefits of *'knowing what works because if you know what you need you will get it'*. (Participant 4)

4.4.6 Academic Achievement

The main success highlighted by three participants related to their academic achievements. The ability to participate in third level education and obtain a qualification was significant to these participants. Participant 2 expressed her previous concerns exclaiming;

"It was something that I always really worried about when I was younger, getting the same education as my best friend or, my little brother. Because obviously it is that little bit harder for someone who is visually impaired". (Participant 2)

Participant 4 regarded her overall transition experience contributed to the successful completion of her studies underlining *'I suppose I'm happy with everything, all the different factors knitted together so then I got my qualification'*. This was further illustrated by participant 3 *"Well definitely academic wise I'm in my 3rd year of my Bachelor degree"*.

4.4.7 Personal Achievement

Participant 3 believed her confidence increased since making this transition. This is illustrated when she stated *'I'd say when I started [college] I probably wasn't as confident in myself as I am now'*.

Participant 5 who is currently in first year determined that the overall transition, moving away from home and gaining independence was her most valued achievement mentioning *'When you're trying to go to third level but also a different county. I was quite proud of myself'*. Participant 3 also identified becoming more independent as a successful outcome for her *'learning to be that bit more independent as well, Independent learning definitely helps'*. She feels she has become *'more well-rounded social wise and then academic wise as well'*.

4.5 Participants' views on what can be done to promote the participation of students with visual impairments in higher education.

Participants were asked for their recommendations on what could be done to promote the participation of people with visual impairments in third level education. Mixed responses emerged.

4.5.1 Recommendations

Participant 2 had no recommendations stating *'They have a pretty good system going. They're doing pretty good as is'*. Participant 5 emphasised the importance of integration and the need to ensure adequate provision of supports for visually impaired students. Furthermore, participant 1 specified the necessity of ensuring students with visual impairments are provided with *'more accessible formats otherwise this is going to cause problems for students with visual impairments'*.

A recommendation suggested by two participants involved a tailored induction for people with visual impairments and other disabilities before commencing studies in their third level institution. They believed this would aid their social integration, providing the opportunity to meet other young people in similar circumstances. This became evident when participant 4 articulated;

"It would have been nice to have a meet and greet with others who would be using the AT room. I would've been a naturally shy person when starting college so it would've been helpful to meet others who use the same supports as me".

(Participant 4)

Participant 3 also highlighted this as a benefit *'students with disabilities would get to know one another'*. Moreover, both participants suggested that this induction could include *'a demo day of equipment to show all students what they have in offer'*.

Participant 4 reinforced this making a suggestion that students could attend *'trade fairs'* so they could gain more information and test out different assistive technologies. Participant three further elaborated *'Then you could talk about what equipment suits some people or what equipment suits others or what you think may be good for you and if there was kind of a follow up then after'*.

Conclusion

This section provided an outline of the results that emerged from the data collected during this research. All participants were aware of DARE as an alternative route to third level education. However, some participants were not eligible. All participants underwent a needs assessment entering higher education and received a range of supports based on their individual needs. This included assistive technology as well as access to an Assistive Technology Centre and examination accommodations such as, extra time, separate examination centre and a scribe or reader. Participants highlighted many challenges they encountered. Accessing learning material was a particular challenge for some participants. The physical environment created many challenges for all participants such as inappropriate lighting, note-taking and viewing the board in lectures. Other challenges involved navigation, unsuitable assistive technology and a lack of understanding. Participants experienced many successful outcomes when transitioning to higher education. Support from disability support services, lecturers and peers were highly valued by participants as contributing to their success. All participants considered self-determination and self-advocacy as important traits for success. Academic achievement, obtaining their degree and personal achievements such as an increase in confidence and independence were regarded as successful for participants. Participants made recommendations to promote the participation of students with visual impairments in third level education. One recommendation involved facilitating a tailored induction for students with disabilities when entering their third level institution. Another recommendation involved students with visual impairments being given the opportunity to attend assistive technology trade fairs to try and select their preferred assistive technology device. The next section will discuss the literature outlined in the literature review along with the findings of this study.

5.0 Discussion

5.1 Introduction

This section aims to discuss findings that emerged from the study and relate them to the existing body of knowledge on the transition experiences of people with visual impairments entering third level education. The results section explored the experiences of people with visual impairments transitioning to third level education. The findings will be discussed under the themes which emerged from the data.

5.2 Supports available for students with visual impairments transitioning to third level education.

Objective one investigates the supports available for students with visual impairments transitioning to third level education. The existing body of literature uncovers a range of supports available to these students embarking on this transition.

5.2.1 Disability Access Route to Education (DARE)

Research has shown a moderate increase in the number of students with visual impairments applying to DARE from 26 applicants in 2010 to 50 in 2016 (Nic Fhlannchadha, 2017). Coinciding with this the majority of participants in the current study applied to third level through the DARE scheme. The study revealed a variation in student's applications to DARE. Four participants in total applied to DARE. Two participants availed of the DARE scheme as an alternative route to higher education. However, one participant did not avail of this route as she chose to do a Post Leaving Certificate course and therefore was no longer eligible. One participant was not considered eligible when she applied for DARE and one participant did not apply for DARE as she did not yet have a diagnosis.

5.2.2 Disability Support Services

According to McCarty and Quirke (2017) the disability support services within higher education are a central component of a higher quality of education. Previous literature highlights the importance of providing supports tailored to the distinct

requirements of each individual identified by an assessment of needs (Dale, 2010; Douglas et al. 2009). In line with Disability Act (2005), all participants in the current study had their needs identified upon entering higher education through a needs assessment. All participants received differing supports and technologies depending on their distinct requirements.

Wessel et al. (2009) articulate that disability support staff are a central component of the effective provision of supports and advocate on behalf of students with disabilities. Interestingly, this study reports similar findings as all participants recognised the disability support staff as being crucial in aiding their transition. In particular, participants acknowledged Personal/Academic Assistants who facilitated them with note-taking during lectures, campus navigation and daily tasks such as purchasing food in the canteen. The participants recognised the valuable role of the Assistive Technology Technician in providing and supporting their use of assistive technologies. Furthermore, participants appreciated the Disability Support Officer in identifying and facilitating supports and examination accommodations.

5.2.3 Assistive Technology

Literature highlights the important role of assistive technology in creating independence and making tasks feasible for students with visual impairments (Abner and Lahm, 2002; Asselin, 2014; Benavente, 2015). In line with this, assistive technology played a significant role in supporting all participants of the current study. As highlighted in the literature, students with visual impairments avail of a variety of assistive technologies which plays a critical role in assisting their participation in education (Palmer, 2005; Evans, and Douglas, 2008). According to literature students with visual impairments utilise assistive technology such as, CCTV cameras, screen magnification software such as SuperNova or ZoomText and screen readers or talking word processors such as Texthelp™. The findings of this study correlates with this, as all participants interviewed operated a range of assistive technology devices and software. Three participants used SuperNova screen magnification software. Three participants also used some type of CCTV camera. One participant benefited from Texthelp™, while another participant tried this word processor, however, they did not find it useful.

Consistent with previous research, the portability of assistive technology was identified by participants as an integral component to the usefulness of these devices as they can be easily transferred to different locations. (Day and Edwards, 1996; Raskind and Higgins, 1998; Forgrave 2002; Kukulska-Hulme et al. 2005). Four participants received laptops which could be used both in college and at home. Three participants used SuperNova magnification software on a portable USB stick which allowed them to access all computers. One participant received a portable CCTV magnifier while another participant used an iPad and camera that she could bring to all her lectures. Further emphasising the importance of portable devices, one participant expressed frustration with impractical devices that were not easily transferred from lecture to lecture.

5.2.4 Examination Accommodations

Douglas et al. (2011) and Kinsella and Senior (2008) stressed the importance of providing examination accommodations to combat the particular challenges faced by students with visual impairments. The study conducted by Hewett, et al. (2015) uncovered that students with visual impairments in Birmingham were provided with examination accommodations such as, extra time and adapted examination papers. In line with this all participants of this study were offered individualised examination accommodations. Accommodations that were afforded to students in the current study included extra time, separate examination centres, adapted examination papers, answer booklets in accessible formats and a reader/scribe. One participant, upon entering higher education opted not to avail of examination accommodations in their first year. However, they disclosed that undertaking exams without supports was too difficult and required the disability service to put supports in place for subsequent examinations. This is consistent with Douglas et al. (2011) and Kinsella and Senior (2008) as the aforementioned participant required examination accommodations in order to combat the challenges she faced.

5.3 The challenges experienced by students with visual impairments entering third level education.

5.3.1 Accessible learning material

Inadequate provision of accessible books and materials has been emphasised as a major struggle for students with visual impairments in previous literature (AHEAD,

2008; Athanasios et al. 2009; Benavente, 2015; Cole-Hamilton and Vale, 2000). Similarly, the findings of this study concluded that participants encountered difficulties accessing learning materials. One participant identified inadequate provision of accessible materials, reporting difficulty in obtaining adapted answer booklets during examinations. Participants also identified that obtaining written material and notes in an accessible format could pose difficulties.

5.3.2 Physical Environment

In the study conducted by Reed and Curtis (2012) participants claimed that the learning environment may hinder their participation in education. The study established that many visually impaired students experience headaches and eye strain due to reading, inappropriate lighting and using computers. Athanasios et al. (2009) stress that viewing PowerPoint presentations during lectures as well as note-taking are particularly problematic for students with visual impairments. In line with Athanasios et al. (2009), difficulties seeing the board in lecture rooms was highlighted as a common challenge for all participants in the current study. Participants communicated that eyestrain made it difficult to concentrate on the board for long periods of time. Two participants in particular articulated difficulties viewing PowerPoint presentations due to the flicking lights from the projector and the colours of PowerPoint slides.

Furthermore, correlating with Reed and Curtis (2012), inappropriate lighting was an issue identified by four participants. Lecture rooms with bright lighting were considered uncomfortable, particularly by students with light sensitivities. Inadequate lighting hindered their use of assistive technology. One participant explained that problems with light reflecting on the board can hinder her ability to see when using her assistive technology.

5.3.3 Navigation

As outlined by Jacobson (1993), the ability to move about and travel self-sufficiently is critical for the independence of people with visual impairments. Hewett et al. (2015) underline the importance of orientation support for students with visual impairments starting higher education. Navigation can often be a significant difficulty for students with visual impairments (Hewett et al. 2015). This was reiterated by findings in the current study as two participants identified substantial challenges

navigating while commencing third level education. This was mainly attributed to adjusting to the layout of an unfamiliar campus and public transport. However, these participants communicated that this became easier overtime as they familiarised themselves with their environment. Another difficulty identified was navigation difficulties due to 'the high influx of people'. one participant articulated that she relied on her Personal Assistant when navigating in busy areas of the college.

5.3.4 Unsuitable Assistive Technology

It has become evident in research that assistive technology is likely to be underutilised or abandoned if it does not fully address the needs of the individual (Cook 1982; Zola 1982). Reasons for the abandonment included difficulties using devices, poor or unreliable performance. (Giltin, 1995; Phillips, 1993; Rogers and Holm, 1992). In line with this, two participants in the current study stated that they did not use an assistive technology as it was ineffective. One participant in the current study stated if an assistive technology device is inconvenient or impractical to use she would not use them. Impracticalities she encountered included too long a set up time and the device being inconvenient to carry around. Another participant explained that she tried Texthelp™ but it did not work for her.

Previous literature also revealed that environmental barriers can lead to the abandonment of assistive technology (Giltin, 1995; Phillips, 1993; Rogers and Holm, 1992). Consistent with this, one participant in this study identified that inappropriate lighting hindered her use of assistive technology. She also stated that her assistive technology device was inadequate in certain lecture rooms as she was unable to see it.

5.3.5 Lack of understanding

Attitudes and a lack of understanding was a particular challenge underlined in literature. AHEAD (2008) uncovered that students with visual impairments may experience low expectations from professionals. This was reiterated in the current study when one participant stated that a lecturer had lower academic expectations of her as the volume of her workload was reduced compared to her peers.

Research conducted by Athanasios et al. (2009) uncovered that a common barrier for students with visual impairments in higher education are attitudes of staff. The present study correlates with previous literature. In the present study, a lack of

understanding by staff transpired for students with visual impairments, especially when trying to explain their impairment or address difficulties. One participant revealed that she was told 'to sit at the back of the class and close her eyes' when she attempted to address her issue of light sensitivity. She communicated that this was unhelpful to her. Athanasios et al. (2009) also highlighted that lecturers disallowing the recording of lectures was a common challenge. In the current study, only one participant required the recording of lectures as part of her accommodations. Contrasting to the literature the participant did not express difficulty with lecturers prohibiting the recording of lectures.

The desire to 'fit in' may often have an impact on young people's engagement with supports provided to them (Byrne, 2014; Hemmingsson, Lidström and Nygård, 2009). Byrne (2014) discovered that Students with visual impairments stated that they felt 'out of place' due to the visibility of their impairment or supports they used. Contrasting with findings participants in this study did not express that they were excluded due to their impairment. One participant articulated that she did not see a difference between students who were visually impaired or not and that she did not experience segregation. However, this participant did explain that on occasion people would make comments about her impairment due to a lack of understanding.

5.4 The successes experienced by students with visual impairments entering third level education.

Athanasios, Konstantinos et al. (2009) discovered that many students with visual impairments consider themselves to have had a positive experience transitioning to third level education, stating that the process was 'easy'. Interestingly this was also identified by all participants in the current study with one stating 'it was a good experience'. Findings from this study reveal that the positive transition experience of participants may be attributed to a number of factors. These include disability support services, lecturer support, peer support, self-determination and self-advocacy.

5.4.1 Disability Support Services

Yssel et al. (2016) supports that the provision of disability support services has been a significant contributor to the increase of people with visual impairments and other disabilities participating in third level education. Sahin and Yorek, (2009) and Wessel et al. (2009) maintain that students with visual impairments can achieve the same successful outcomes as their sighted peers once appropriate interventions are provided by disability support services. All participants in this study identified that the supports and assistive technology they received were a major contributor to the success they experienced while transitioning and adjusting to third level education. All participants expressed disability supports as 'helpful' or 'brilliant'. They all felt comfortable asking disability support staff for assistance when needed. Participants regarded staff providing disability supports in their third level institution as fundamental in helping to overcome challenges. One participant believed that she would not have been able to continue through third level education without the supports she received. Another participant emphasised that supports were of 'critical importance' to her.

5.4.2 Lecturer support

Many people with visual impairments claim that they experience positive collaboration with academic staff (Athanasios, et al. 2009). The current study revealed that participants considered it crucial to receive adequate support from lecturers. All participants expressed positive experiences liaising with lecturers. They articulated that lecturers were helpful taking extra time to provide assistance and ensuring their teaching was inclusive. One participant explained how their lecturer read out handouts and facilitated group discussions in class instead of instructing students to read handouts individually. One participant maintained that her lecturers would remain back after lecturers to provide assistance or enquire if she needed extra support. Another participant highlighted that lecturers in computer laboratories would adapt their teaching style and took time to adequately explain what they were teaching.

5.4.3 Peer support

Kef and Deković (2004) suggest that peer support has a greater impact on the well-being of young people with visual impairments compared to that of young people without visual impairments. Many students with visual impairments claim that they

experience positive social interaction and build good relationships with their peers (Athanasios et al. 2009; Perez, 2013).

In this study, peer support was identified as integral to participants in overcoming academic as well as social challenges. Many participants also professed positive social interactions with peers. Friends were highly regarded as key people in helping to overcome challenges for all participants. Two participants elaborated, explaining how classmates assisted them with note-taking during class, stating that this allowed them to take a break when experiencing eye strain. Additionally, one participant identified how peers were helpful in supporting social interactions, explaining that her friends would 'keep an eye out for her on nights out'. Nonetheless, contrasting with literature (Athanasios et al. 2009; Perez, 2013) one participant disclosed that they found that their visual impairment made it difficult for them to approach people.

5.4.4 Self-determination

Literature has highlighted that self-determination has significant implications on the quality of lives of people with visual impairments and other disabilities (Lachapelle et al. 2005; McDougall et al. 2010; Wehmeyer and Schalock, 2001). Furthermore, the existing body of knowledge emphasises that self-determination has a positive impact on the academic performance of students with disabilities. It also promotes an active involvement in their transition to third level education (Fowler et al. 2007; Test et al. 2004).

According to participants in this study, each individual's self-determination and motivation was a major factor leading to success. All participants of the study stressed that their own self-determination was a primary influence on successful outcomes along with supports they received. All participants stressed that the determination to be independent and increase their employability was a key motivating factor to successful outcomes.

5.4.5 Self-advocacy

In Reed and Curtis's (2012) study staff indicated that a lack of self-advocacy skills contributed to a lack of confidence in students. 21% of students identified that learning advocacy skills would help overcome challenges.

In this research, the importance of self-advocacy emerged as a recurring theme among all participants in order to achieve positive outcomes. All participants emphasised the significance of making their voice heard and 'asking for the help they need'. Contrasting with Reed and Curtis's (2012) study, all participants were confident in exercising self-advocacy skills and employed them on a regular basis. Participants stressed that students should not be afraid to communicate with disability support staff and 'seek as much support as they can'. They believed that this made their transition easier.

In this study participants identified what they determined to be successful outcomes. This included both academic and personal achievement. Two participants valued academic achievements and obtaining their third level qualification as a major success. Additionally, two participants regarded gaining their own independence as their most positive outcome. One participant also believed their transition to third level helped increase her confidence which she considered a success.

5.5 Participants' views on what can be done to promote the participation of students with visual impairments in higher education.

5.5.1 Participants' recommendations

In the study conducted by Hewett et al. (2015) participants made recommendations in relation to living accommodations in third level institutions to ensure that equipment and utensils along with the physical environment were accessible. Contrasting with this, no such recommendations emerged in this study. No participants made recommendations relating to third level living accommodation.

Literature emphasises the importance of accessing learning material to enable the participation of students with visual impairments in higher education (AHEAD, 2014). Furthermore, literature underlines difficulties for students with visual impairments obtaining learning material in accessible formats (Benavente, 2015; Cole-Hamilton

and Vale, 2000). One participant of this study reiterated this. They recommended that it is necessary to ensure that all students receive accessible learning material. Another participant recommended that it is important to ensure that adequate supports are provided to students with visual impairments.

Interestingly, one participant was happy with the provisions that are in place and had no further recommendations to make.

5.5.2 Tailored inductions

Research conducted by Hewett et al. (2015) revealed that many students with vision impairments in Birmingham were offered induction programmes prior to commencing study in third level education. The Birmingham study highlighted that inductions to aid the transition to third level education was a principal support provided by disability support services in higher level institutions. This was considered highly advantageous in aiding their transition and social integration when entering third level education (Hewett et al. 2015). Contrasting with literature, a tailored induction was not afforded to participants of this research when entering third level education. However, two participants in the study recommended that a tailored induction should be offered to students with visual impairments and other disabilities before commencing studies in their third level institution. They felt this would aid their social integration, providing the opportunity to meet other young people in similar circumstances. AHEAD (2008) stressed that funding should be made available to third level institutions to offer summer computer, orientation and mobility training courses to students with disabilities transitioning from secondary education. It has been identified that these proved to be extremely beneficial in the past but were discontinued due to insufficient funds (AHEAD, 2008).

5.5.3 Attending assistive technology trade fairs

Findings from the current study uncovered participants' wish to attend demonstration days allowing them to trial and gain information regarding new assistive technologies which may be beneficial to them. One participant suggested that this could be incorporated into the induction to third level. This allows students with visual impairments to have their own views taken into consideration when selecting a device that works best for them. This is significant as research identifies that failing

to consider the preferences of the user often leads to the abandonment of assistive technology (Scott, 1997).

5.6 Suggestions for Further Research

It is recommended that a larger scale qualitative study is conducted on the experiences of students with visual impairments transitioning to third level education to gain a wider insight, representative of all students with visual impairments. A study may be carried out to include young people with visual impairments who have not continued to higher education to ascertain why this was the case, if this was due to their own decision or barriers they encountered. Additionally, it is suggested that a longitudinal study is conducted to track the transition of students with visual impairments overtime, gaining a greater understanding of their experience, and how to promote their participation in third level education.

5.7 Conclusion

This section has discussed the existing literature outlined in the literature review in relation to the findings of this study and in line with my aims and objectives. The next section will provide a conclusion for the overall study followed by recommendations for future research and practice.

6.0 Conclusion

In conclusion, this research set out to explore the challenges and successes of the transition to third level education for students with visual impairments. This research has provided a clear account of the experiences of students with visual impairments transitioning to third level education.

The study identified a wide range of supports students with visual impairments receive when entering third level education following an assessment of needs. The study highlighted many challenges encountered by students with visual impairments transitioning to third level education. These include accessing learning material, physical environment, navigation, unsuitable assistive technology and a lack of understanding. Overall the study found that students with visual impairments believed to have had a successful transition to third level education. This was attributed to support from disability support services, lecturers and peers, their won self-determination and self-advocacy. Being able to obtain their third level qualification, gain independence and increased confidence were regarded successful outcomes by participants. Two main recommendations from participants emerged involving the facilitation of a tailored induction for students with disabilities entering third level education and providing the opportunity for students with visual impairments to attend trade fairs to trial and gain information on new assistive technology.

7.0 Recommendations for Practice

This section will outline recommendations for practice to promote the participation of students with visual impairments in third level education. This section will be divided into two headings. 1) Recommendations from participants. 2) Recommendations from the researcher.

7.1 Recommendations from participants

Third level institutions should insure that accessible learning material is available to students with visual impairments. A tailored induction programme should be offered to students with disabilities entering third level education to aid their social integration and provide information about the technology and supports which will be available to them.

Students with visual impairments should be afforded the opportunity to attend assistive technology trade fairs. This allows them to be informed and kept up to date about new technologies available. Additionally, they would be able to test assistive technology devices to establish what works best for their distinct needs. To facilitate this, it would be beneficial if trade fairs travelled to third level institutions to demonstrate assistive technology on offer.

7.2 Recommendations from the researcher

In addition to the previous recommendation of tailored induction programmes, summer camps should be facilitated for students with visual impairments prior to entering third level educations. A summer camp could be designed to prepare students with visual impairments for transitioning to third level education. It could include assistive technology training, study skills, orientation training and independent living skills to promote independence and aid their transition.

As highlighted in the review of literature the provision of Individual Education Plans (IEPs) for students with disabilities in primary and secondary level education has not yet been implemented. It is suggested that this has had an impact on the transition of students with disabilities to third level education (McGuckin et al. 2013). Therefore, it is recommended that IEPs are provided to students with visual impairments at

primary and secondary level to ensure effective support, planning and transition to second level education.

The Higher Education Authority has set a target to increase the number of students with visual impairments in third level education. In order to meet set targets and increase participation rates of students with visual impairments in third level education, it is recommended that third level institutions appoint a student ambassador to engage with visiting teachers, guidance counsellors and students with visual impairments in second level education to promote their participation in third level education. In doing this, they could inform practitioners and students about the third level institution and the supports available.

This study has highlighted many challenges encountered by students with visual impairments due to their physical environment. The Disability Act (2005) provides an obligation to ensure that all public buildings are accessible to persons with disabilities. However, focus is often placed on accessibility of buildings for people with physical disability, neglecting the needs for people with sensory disabilities. Third level institutions should be audited to ensure that campuses are fully accessible for everyone. An obligation should be placed to ensure that buildings have adequate lighting. All windows in lecture rooms need to be equipped with blinds. Artificial lighting should not create glare, pools of light or dark shadows. Shadows or glare should be avoided from changing daylight, high gloss surfaces or artificial lighting. All campuses should have adequate signage. Signs and door numbers should be large print, embossed text and braille, low enough that they can be touched.

It is recommended that a greater awareness of visual impairments is created. This would create a better understanding of the challenges faced by students with visual impairments. Information should be provided to lecturers and academic staff on how they could adapt their teaching style to accommodate all students.

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Appendices

Appendix 1: Email to Gatekeeper



Dear _____,

My name is Dawn Murtagh. I am a student with a visual impairment studying in Athlone Institute of Technology. I am currently undergoing a Masters in Child and Youth studies. As part of my studies, I am conducting a thesis which aims to explore the challenges and successes of the transition to third level education for students with visual impairments. The research is being supervised by a lecturer in the Department of Humanities.

I wish to interview people with visual impairments who have made the transition to third level education. I would be delighted if you could forward on the attached information and consent form to any people with visual impairments who may be interested in taking part in this study.

Your time and assistance is greatly appreciated. Thank you very much.

Kind Regards,

Dawn Murtagh.

Appendix 2: Information Letter



Dear _____,

My name is Dawn Murtagh. I am a student with a visual impairment studying in Athlone Institute of Technology. I am currently undergoing a Masters in Child and Youth studies. As part of my studies, I am conducting an empirical research project. The aim of this study is to explore the challenges and successes of the transition to third level education for students with visual impairments. The research is being supervised by a lecturer in the Department of Humanities.

I wish to interview people with visual impairments who have made the transition to third level education. I would like to gain an insight into their experience of making the transition to higher level education, the challenging and successful experiences they encountered and if there is anything that can be done to promote the participation of students with visual impairments in higher education.

I wish to invite you to participate in this research by completing an interview. Interviews will be held at a time and place that suits the participant and will last approximately 40 minutes. Participation is entirely voluntary and participants may withdraw from the process at any point, if they wish.

The information I gather will be used only for my Thesis. With your permission, I may use quotes to highlight certain points or findings. No names or personal information will be used. The anonymity of participants will be preserved at all times.

The interview will be recorded and then transcribed verbatim. All information that is recorded from the interviews will be destroyed after the information is transcribed. If you wish, you will also be given the opportunity to read over this transcript to insure that you are satisfied that all information is accurate. The transcript will be disposed of on the 31st of May 2017.

If you wish to participate or have any questions or queries, please contact me on 087 282 1954 or email me at A00204804@student.ait.ie.

Thank you very much for your time and assistance!

Kind Regards,

Dawn Murtagh.

Appendix 3: Consent Form

Consent Form

I agree to participate in an interview regarding the challenges and successes for people with visual impairments' transition to third level education. I understand that the information will be used as research and that my name and no other identify information will be used in the research. It is entirely confidential. I also understand that I may withdraw from the process at any point, if I wish.

Signed: _____

Date: _____

I agree to that the interview can be audio recorded and understand that the recording will be destroyed once the information has been transcribed.

Yes

No

Signed: _____

Date: _____

Appendix 4: Interview Schedule

Interview Schedule:

- Did you receive supports when transitioning from second level to third level education?
- If so, what is your opinion of these supports? Were they helpful?
- Did you receive supports in third level education? And if so, did you find them helpful? If not, why?
- What challenges did you face when making the transition to third level education? If any?
- What did you find most challenging?
- How did you face these challenges?
- Who were the key people to help you overcome these challenges?
- How would you describe your interaction with social life in higher education? What was challenging?
- What went well for you when making the transition to higher education? /What have you found successful?
- What do you think has led to these successes?
- If you could talk to someone with a visual impairment who is transitioning to third level education what advice would you give them?
- In your opinion what could be done to promote the participation of students with visual impairments in higher education?
- Is there anything else you think I should know that has not been asked?

Appendix 5: Reflection

My decision to conduct this research was influenced by my own lived experience as a student with a visual impairment. Upon research, I was disconcerted to realise the underrepresentation of students with visual impairments participating in third level education. I resolved to conduct research on this topic because of my interest to discover the experiences of other students with visual impairments and identify what can be done to reduce the barriers for students with visual impairments transitioning to third level education.

Throughout this research I remained mindful that this topic is very close to my own personal experiences. As a student with a visual impairment I could closely relate to the experiences of participants who took part in this study. Nevertheless, I have had to ensure that my personal perceptions and bias did not have an impact on the findings of this study. I have had to strongly position myself as a researcher and remain objective.

I feel I may have struggled with bias on a small level during the initial stages of my research. My own predetermined ideas of the experience of transitioning to third level education as a student with a visual impairment may have been evident in my early drafts. However, through the process of supervision, reflection and rewriting drafts I became more objective throughout the research process.

I have found this research a valuable learning experience both on a personal and academic level. I have gained an increased awareness of my own experiences and learned how to be objective as a researcher.