

Giving voice to blind and visually impaired students transition experiences, addressing gaps in policy provision



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## Foreword

AHEAD is pleased to publish this research report which was conducted by the Inclusive Education and Society Research Group (School of Education, Trinity College) and the Higher Education Authority on the experiences of students with visual impairments or blindness who are moving from secondary education to higher education. In 2008, AHEAD published a report entitled *Seeing AHEAD: A Study of Factors Affecting Blind and Vision Impaired Students going on to Higher Education*. It posed the question: are blind and Vision impaired children in mainstream secondary education in Ireland getting the opportunity to engage with an education that meets their needs and enables them to achieve the same educational outcomes as any other student. The AHEAD report revealed that these students were four times less likely to transfer to higher education than their peers. It indicated that there were considerable challenges for the educational system that included a lack of information and data, an inaccessible curriculum, an under use of technology and a complicated system of application for supports.

The concept of under representation in education is complex and to address it the National Office for Equity of Access to Higher Education has identified the need for greater consideration of the measurement of under representation[[1]](#footnote-2) in relation to specific and identifiable categories of potential students of Higher Education. One of the identifiable categories is students with a vision impairment.[[2]](#footnote-3)

The main aim of this research therefore is to delve deeper into the actual experiences of students and to interrogate the complexity of the challenges faced by these students. Given the lack of research into the education experiences of blind and vision impaired young people, a qualitative approach was considered the best method to bring their voice to the discussion, to hear what they have to say, to “*see the world from the point of view of the people studied” (*Hammersley 1992:65*).*

Listening to the student voice to inform continuous improvements is a critical action in assuring the quality of provision of student supports and resources. The QQI Quality Assurance Guidelines for higher education and training state:

*“Providers should listen to students concerning their perceptions about the sufficiency and quality of learning resources and student supports” [[3]](#footnote-4)*

This research gives voice to the student experience in making the transition from second level to higher education and provides us with a unique insight into the negative attitudes, structural barriers and learning problems they encounter on a daily basis in participating in what should be an ordinary education. It will also highlight strategies and approaches that have worked effectively for these students to enable them to realise their constitutional rights. The research will address four research questions:

* What are the transition experiences of blind/vision impaired young people?
* What are the experiences of professionals who are supporting these young people?
* Are young people experiencing any access challenges that impede making an effective transition?
* What suggestions/recommendations could be made to improve transition?

Ann Heelan

Executive Director

AHEAD

## Acknowledgments

Sincere thanks to all of the participants who gave their time voluntarily to share their experiences for this pilot study. We are very grateful for your participation and greatly appreciate your openness discussing at times sensitive or upsetting situations. In particular we would like to wholeheartedly thank and applaud the student participants for their enthusiasm and strength of character. We wish each of you the very best in all your future transitions.

**We would also like to acknowledge and thank the Higher Education Authority and AHEAD for funding this small-scale pilot study and the National Forum for the Enhancement of Teaching and Learning for funding our seminar.**

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## Executive Summary

**“Giving voice to blind and visually impaired students transition experiences, addressing gaps in policy provision’** gives a snap shot of life for a handful of students, with a low incidence disability in Ireland, in this case, students experiencing sight loss. This small scale pilot study focused on the transition experiences of 4 blind and visually impaired students and also draws on the multiple perspectives of family, service providers, educators and advocacy groups etc. This Higher Education Authority pilot study was designed to investigate the challenges and facilitators that contribute to these young people reaching their potential.

A review of current literature and policy in the area of provision for young people with special educational need was conducted and set a framework to analyse qualitative interview data. In total 18 participants took part in the study. In depth profiles of 4 students **Jack**, a current Transition Year (TY) pupil, **John** studying for his Leaving Certificate, **Sandra** preparing for her first year undergraduate degree exams and **Aoife** enjoying her second year of her undergraduate degree. The student profiles give in-depth insights into the transition barriers and facilitators for blind and visually impaired students. While, the student voices are the heart of this study, the research team also chose to include the voices and experiences of their ‘support circles’, these include parents, resource teachers, classroom teachers, special needs resource co-ordinators, parents, disability service, school principal, representatives from Féach, parent support group for blind and visually impaired children and the Visiting Teacher Service. To ensure inclusion of as many stakeholder views as possible we decided to host a seminar on the topic of access to third level education for VI/Blind students. The ‘Access to Higher Education for Blind/Visually Impaired students in Ireland’ seminar was held at Trinity College Dublin’s School of Education on September 25th 2014 and funded by the National Forum for the the Enhancement of Teaching and Learning. On the day there were 40 representatives from a range of stakeholder groups, including students who led discussions.

Several key recommendations are made to support improving transition experiences, opportunities and outcomes for this group of students. These recommendations are directed at system, institutional and school levels:

1. Implementing the Individual Education Plan (IEP).
2. Review collaborative framework between school personnel and the Visiting Teacher Service with students and families, to make best use of scarce resources.
3. Provision for structured transition plan to engage in outreach educational support activities between post-primary and third level sectors.
4. Develop and Implement a Customised Plan for Transition Year to address the needs of blind/visually impaired students on a national basis.
5. Provision of Tailored Career Guidance Support for Blind/Visually Impaired Students.
6. Review of the provision for reasonable accommodations by the State Examinations Commission and by Schools.
7. Specific Efforts to Address Mathematics Physical Education Access Issues.
8. Greater Exploitation of “Mainstream” technology to address assistive needs.
9. Align Braille and Print Materials Delivery.
10. Establishing peer support networks to reduce burden on scarce resources.

# *Introduction - Research rationale*

This report represents a small-scale qualitative research study into the senior cycle transition experiences of blind/visually impaired young people in Ireland. It is supported by AHEAD and Trinity College Dublin’s School of Education’s Inclusive Education & Society Research Group and funded by the Higher Education Authority and AHEAD.

In Ireland, over the last two decades, there have been significant changes in the policy and provision for young people with special educational needs, which are reflective of an increasing awareness of the benefits of inclusive education policy and practices. These changes correspond with an international call, through legislation and policy for encouraging and promoting more inclusive education policy and practices. This study is set within the Irish context of the Report of the Special Education Review Committee (Department of Education, 1993), the introduction of the Education Act 1998 and most recently, in the last decade, the Education for Persons with Special Educational Needs (EPSEN) Act, in 2004, which endorsed the Individual Education Plan (IEP) though this element of the Act has not been implemented. And while the EPSEN Act, was warmly welcomed by people with disabilities, their families, practitioners and researchers, until the full reality of this Act is achieved, through the implementation of the Individual Education Plans (IEP) the playing field for students with disabilities and their non-disabled peers continues to be uneven.

Without the support of the IEP and all it entails, young people with disabilities in Ireland, (blind and visually impaired children, young people with low incidence (LI) disabilities, such as deaf and hard of hearing, deaf blind, mild and general learning disability and young people on the autism spectrum, are prone to be the most vulnerable in the mainstream education environment. Given, the low incident nature of these disabilities, a student may be the only pupil in their school, with for example, a visual impairment, or who is deaf. This can be a daunting experience for the student in this mainstream education setting, who is likely to be without peers or staff that know what is it is like to live with this disability, or have ever supported someone with this type of disability. In these low incidence cases, the need for the IEP is a life line, a fundamental support mechanism, to ensure the allocation of sufficient time to identify the low incidence student’s needs and ensure classroom teaching and learning methodologies, appropriate resource support, adequate time is set for training in relevant equipment (for both the teaching staff and student) to meet the young person’s needs to allow them to access the curriculum and fully participate in school life and make an effective transition. The experiences of young people with low incident disabilities in Ireland, to date, have not received a huge amount of attention in research circles. The need to fully explore and document the lived education experiences of these lesser heard stories by giving “voice’ both to their experiences, their families and their educators, so as to subsequently ensure both policy and practice provision captures and incorporates their needs most authentically drives this piece of research and aims to lay foundations to develop further investigations in this under-researched area.

While, we recognise the extent of work required to roll out and implement the IEP, and acknowledge the economic restraints the country has experienced in the last decade, there is also the strong evidence and belief that “there is no turning back from this vision”.

(Griffin and Shevlin, 2011: 2).

This current study aims to give a snap shot of life for a handful of students, with a low incidence disability in Ireland, in this case, students experiencing sight loss. This small scale pilot study focuses on the experiences of four students and also draws on the multiple perspectives of family, service providers, educators and advocacy groups etc. The student cohort comprised of Jack, a current Transition Year (TY) pupil, John studying for his Leaving Certificate, Sandra preparing for her first year undergraduate degree exams and Aoife enjoying her second year of her undergraduate degree. While, the student voices represent the heart of this study, we have also chosen to include the voices and experiences of their “support circles”, these include parents, resource teachers, classroom teachers, special needs resource co-ordinators, parents, disability service, school principal, representatives from Féach, parent support group for blind and visually impaired children and the Visiting Teacher Service.

To ensure inclusion of as many stakeholder views as possible we decided to host a seminar on the topic of access to third level education for VI/Blind students in September 2014. Some of the recommendations that will be included in this study also emerged during this debate, which included 40 representatives from a range of stakeholders, including students.[[4]](#footnote-5)

## *Report Outline*

Following this introduction the report is divided into five sections:

1. Literature review
2. Methodology
3. Student profiles
4. Key findings
5. Policy & practice recommendations

## Literature Review

### Introduction

Ireland has witnessed important developments in how we think about and respond to disability as a public issue. Watson and Nolan (2011) argued that the task for society and the educational system is to accommodate the needs of children and young people with a disability and to acknowledge their differences, while facilitating them to maximize their accomplishments. This literature review will consider some of the pertinent issues related to vision impaired young people and their access in relation to education including challenges.

#### Irish policy context

In Ireland restructuring of the education system commenced in the 1990s resulting in significant changes to special education. International demands for a more non-discriminatory education system that acknowledges diversity and recognizes how ‘schools might address the needs of pupils who have been previously marginalized’ (Rose, Shevlin, Winter, & O’Raw, 2010: 359) have influenced these developments. The Salamanca Statement (1994) advanced the need to afford opportunities for equal participation to all students within regular classrooms wherever possible. The United Nations Convention on the Rights of Persons with Disabilities (2006) recommended that states shall guarantee that persons with disabilities receive the required supports within the general education system to facilitate their effective education including, appropriate individualized supports that maximize academic and social progression, consistent with the objective of full inclusion. Article 24 (3) refers specifically to the education of blind and deaf children and asserts that their education should be provided for within environments that maximize academic and social development, and use the required communication modes to meet their needs in the most appropriate manner. While article 9 refers to accessibility and states that

h) To promote the design, development, production and distribution of accessible information and communications technologies and systems at an early stage, so that these technologies and systems become accessible at minimum cost (UNCRPD, 2006).

Ireland is a signatory to the UNCRPD but to date has not ratified it and consequently this is not legally binding.

At a national level Ireland has seen a proliferation of legislation introduced since the 1990s that is germane to the education of children and young people with special educational needs. Ireland has endorsed an inclusive stance and the rights of disabled children and adults are increasingly recognized in legislation. The legislation considered most pertinent includes the Education Act (1998), the Equal Status Acts (2000, 2004), the Education for Persons with Special Educational Needs Act (2004) and the Disability Act (2005).

The 1998 Education Act was the first piece of legislation in the history of the state that specified the legal rights and duties of the Irish Government pertaining to education. Within this legislation all schools and all teachers have an obligation to all children, including those with special educational needs and/or disabilities. The Education Act stated the need to advocate equality of access to and participation in education. Contained within this legislation was the first legal definition of ‘disability’. This definition was firmly rooted within a medical model of disability and focused exclusively on within-child deficits and ignored environmental and contextual factors (Griffin & Shevlin, 2007).

The Education for Persons with Special Educational Needs Act (EPSEN, 2004) epitomizes a significant landmark in education legislation provision for pupils with special educational needs. The definition of disability utilized in this Act contrasts significantly with the medical definition of disability contained in the Education Act 1998 as it does not concentrate solely on within-child deficits and acknowledges that difficulties in learning are relative rather than all-encompassing (Griffin & Shevlin, 2007). Due to economic constraints only elements of the EPSEN Act have been implemented. Consequently, the statutory obligation on schools to introduce a system of Individual Education Plans (IEPs) that was a significant component of the Act has not been implemented. This poses significant difficulties in developing a feasible framework for transition planning (McGuckin, Shevlin, Bell, & Devecchi 2013). Furthermore, it is recognized that the failure to implement the element of this legislation relating to IEPs has diluted the impact of the Act (Rose, Shevlin, Winter, O'Raw & Zhao 2012).

The main function of the Disability Act 2005 is to enable provisions for the assessment of health and education needs of people with disabilities. Part 2 of the Act refers to the legal right to access an assessment for children of school age. However, to date this legal entitlement is only available to children aged five and under. This is because of the economic constraints implemented in 2008.

It is evident that there has been substantial progress made to include students with disabilities within higher education in recent decades. Many factors have contributed to this including the implementation of pertinent policies and the increased level of supports available to students with disabilities. A dedicated fund for students with disabilities was established in 1994 as a recommendation of AHEAD research. This funding is earmarked for students with a disability who need extra supports and services in further or higher education (HEA, 2005). Spending through this fund is confined to services or equipment directly linked to identified students with disabilities (HEA, 2005). The allocation model for this fund was revised in 2010 and now allows for greater local decision-making by disability/access services. Consequently, ‘A single per-capita allocation now applies to all approved students with disabilities in higher education, with additional funding available for sign language, personal assistance and transport as required’ (HEA, 2010: 16). One of the limitations of this funding is that it only provides support to full-time students and this may account in part for the low level of students with disabilities that pursue part-time courses within the higher education sector. Part time participation of students with disabilities is at 1%, indicating that they are very under-represented (AHEAD Participation Rates 2015). In response to this the HEA (2010: 10) have advocated that there should be ‘parity of treatment for part-time students in public funding allocations’.

It is recognized that students with disabilities lack sufficient opportunities to access and participate fully in higher education (HEA, 2008). Therefore, in 2009 the Disability Access Route to Education (DARE) was launched nationally. This is an admission scheme used by colleges and universities that offer places on a reduced points basis to people with disabilities aged under twenty three years of age, who have completed their Leaving Certificate. The availability of a dedicated disability officer is considered significant for institutions to achieve widening participation (HEA, 2008). It was identified that in 2009 all higher education institutions had a minimum of one part-time staff member who oversaw disability support and accommodations (HEA, 2010). During 2008-2010, higher education institutions commenced the development of access plans for local implementation. It is recognized that these plans are vital to ‘make progress on access targets and goals nationally’ (HEA, 2010: 8). It is intended that these access plans ‘will become an integral part of institutions’ strategies and the HEA will continue to work with institutions on this objective’ (HEA, 2010: 8). The HEA assert that it is their objective through the National Office for Equity of Access to Higher Education, to eliminate the barriers to participation that continue to prevail for particular groups of students (HEA, 2008). It is significant in developing a mainstream infrastructure in higher education that all HEI’s have identified goals in the areas of Access for under-represented groups, as well as flexible teaching and learning as key themes in their Performance Compacts with the HEA.

#### Access to the curriculum

A range of factors are significant in relation to access to the education system for blind/vision impaired children and young people as vision plays a crucial function in education and learning (Khadka, Ryan, Margrain, Woodhouse, & Davies, 2012). It is imperative to recognize that to include blind/vision impaired pupils within mainstream classrooms adjustments to teaching and learning methodologies are essential (AHEAD, 2008; McCarthy, 2013). It is acknowledged that when class teachers suitably adapt teaching and learning methodologies to the students’ requirements, they are equipped to study independently on a parity with classmates (Whitburn, 2014). Studies demonstrate that teaching and learning practices can present significant barriers to disabled students’ learning (Rioux & Pinto, 2010; Vickerman & Blundell, 2010). It is accepted that for some young disabled people curriculum choices are significantly curtailed due to inadequate access to the curriculum, disabling environments and disabling attitudes (Shah, 2006).

Franklin, Keil, Crofts and Cole-Hamilton (2001) identified Geography, Science and Physical Education (PE) as subjects that blind/vision impaired young people found difficult to access, while participants in a study conducted by Khadka et al. (2012) perceived that teachers occasionally discriminate against pupils with special educational needs particularly during Physical Education (PE). Studies indicate that many physical education teachers feel unqualified to teach disabled pupils demonstrating shortcomings in initial teacher education and continuous professional development (Fitzgerald, 2005; Morley, Bailey, Tan, & Cooke, 2005). However, McCarthy (2013) stated that greater access to assessments in some subjects including Geography had improved for blind/vision impaired students as a result of the availability of modified papers for state examinations. Furthermore, McCarthy (2013) identified that some of those who participated in her study did the Leaving Certificate Applied course rather than the traditional Leaving Certificate. Consequently, as the former is more vocational in nature and has more ongoing assessments, this may have contributed to some participants experiencing fewer access barriers to particular subjects. However, it must be recognized that while this is a valuable programme it does limit post-school choices (Banks & Smyth, 2011; McCarthy, 2013).

The importance of Mathematics for entry to third level education has been identified by many including Cahill et al., (1996) and AHEAD, (2008). However, research also recognized that access to the Mathematics curriculum is particularly challenging for blind/vision impaired people (Karshmer & Bledsoe, 2002; McCarthy, 2013). The presentation of Mathematics is generally visual, two-dimensional, and nonlinear in nature (Cahill et al., 1996). This can impose access barriers for blind/ vision impaired people. Confusion with Braille notation and the fact that the majority of Maths teachers do not know Braille Maths notation (Karshmer, & Bledsoe, 2002) also contribute to the challenges experienced by blind/vision impaired students when accessing the Mathematics curriculum. Cahill et al., (1996) identified graphical-spatial mathematical topics, including tables and graphs as particularly challenging for those with severe vision impairments as Braille is not always adequate for mathematics notation. Furthermore, while speech synthesizers are beneficial when using word processing packages they do not always work effectively for mathematics (Cahill et al., 1996). While Whitburn, (2014) suggested that detailed verbal descriptions of complex mathematical problems enabled participants to follow the material independently, Shute, Graf and Hansen, (2005) argued that as the intricacy of visual content intensifies so does the challenge of presenting it to blind/vision impaired students. Consequently, while detailed descriptions may be adequate for straightforward graphs and diagrams, ‘tactile media, perhaps in the form of audio-tactile graphics, may be better for more complicated mathematical elements’ (ibid). Sahin and Yorek, (2009) have argued that if vision impaired students receive the required accommodations they can realize their potential in the same way as their sighted peers do.

#### Access to technology

Many recognize the significant role that technology can play in the lives of vision impaired people (Palmer, 2005; Evans, & Douglas, 2008). McDonnall and Crudden (2009) state that the utilization of assistive technology is ‘a compensatory skill’ as it allows vision impaired people to undertake tasks that are frequently performed by sighted persons. However, it is recognized that there can be an assumption that assistive technologies are all that are required to level the playing field (Foley & Ferri, 2012; Evans, & Douglas, 2008) or that when assistive technology is supplied the goal of access is realized (Söderström & Ytterhus, 2010), but it is not always that simple. Foley and Ferri (2012: 195) indicated that there is an attitude which suggests that ‘there is technology that is designed *for* disabled people and technology designed for *presumed* non-disabled people; and more importantly, the latter need not be accessible *because* of the former’. Consequently, if technologies are to become truly accessible to disabled people there is a need to understand disability and technology in a more appropriate manner whereby disabilities is not conflated with assistive technology (Foley & Ferri, 2012), and offer a perception of accessible technology as opposed to assistive technology (ibid). Research identicates that while e-learning is increasingly prevalent such systems have been designed with limited functional appreciation of disability (Foley & Ferri, 2012). So although e-learning has the capacity to facilitate inclusion, while software and hardware are designed and manufactured without adequate examination of their accessibility, vision impaired people will continue to experience significant challenges. Furthermore, Fichten, Asuncion, Barile, Ferraro, & Wolforth, (2009) indicated that vision impaired/blind students have a way to go before they can work autonomously in an educational environment that utilizes e-learning tools.

Research conducted by Söderström and Ytterhus (2010: 311) articulated that ‘simply using ICT assistive technology – in school, at home or during leisure time with friends – drew unwanted attention to their impairment’. Consequently, while the majority of blind participants deemed the use of assistive technology beneficial as it enabled them to participate in essential aspects of their peers’ interactions, most of the vision impaired participants opted not to utilize the assistive technology. Söderström and Ytterhus (2010: 311) argued that the various decisions made by participants regarding this matter correlated with how they ‘experienced the social cost of those choices’. Research indicates that disclosure can be perceived as a problematic issue (Wilton, 2006), and the need to disclose in order to receive the necessary supports and resources required can be particularly challenging for those who vehemently try to protect personal autonomy (Percival & Hanson, 2007). Consequently, refusing to utilise assistive technology may be connected to an unwillingness to disclose one’s disability within particular settings.

#### Access to print material

Print material is an inherent element of the education system and one’s ability to access it is essential in order to access the curricula. Vik and Lassen (2010) acknowledge that by appreciating the advantages of Braille, print and text in audio format, greater awareness into the reading support requirements of vision impaired/blind pupils may be acquired. Michalko (2001, p. 352) stated that ‘Reading, and doing so *with the eyes* is an assumption as universal to the classroom as is the raising of the hand’. However, he also recognized that there are numerous ways to read and while visually is the primary way, it is not the singular way. Harpur and Loudoun, (2011) argue that generally students with print disabilities cannot read regular print and need their textbooks modified to meet their individual needs. Many studies have indicated that the inordinate delay in receiving print material in accessible formats is a cause for concern (Cole-Hamilton & Vale, 2000; Harris & Oppenheim, 2003). It has been recognized that of the written material readily accessible to the majority of learners, only 5 percent is similarly available to many with impaired vision (Bolt, 2004). This lack of access to print material significantly restricts access to the curriculum for vision impaired people. Harpur and Loudoun (2011) argue that students with print disabilities require prompt access to the necessary textbooks if they are to participate with the wider student population on a relatively equal basis. Furthermore, they suggest that students with print disabilities continue to experience barriers that the wider student population does not encounter. While many vision impaired people now access print material in audio formats Vik and Fellenius (2007) argue that there are limitations to accessing written material in recorded format and that this medium is not equal to written language. Consequently, many argue that the continued learning of Braille is essential (AHEAD, 2008). However, the use of, and access to Braille has declined over time for a variety of reasons including, increased access to technology, time factors and costs associated with producing materials in Braille.

#### Access to transition opportunities

The most significant transitions tend to occur in adolescence and early adulthood when a “tyranny of choices” (Williams & Young, 1992) are considered as the individual moves between schools and from school to further education/higher education and employment. Wong, (2004) acknowledged that there is often a disconnection between what young people aspire to and what they are capable of doing, and another disconnection between what they are capable of doing and the opportunities open to them. Furthermore, Wong (2004) argued that appreciating the personal choices made by blind/vision impaired people and understanding how these are shaped will help people take account of what matters to these individuals when making their post-school decisions. It is widely recognized the important role that schools have in facilitating effective transitions for young people (National Council for Curriculum and Assessment, 2009; McGuckin et al., 2013). In Ireland decisions taken at secondary school regarding subject choice, the level at which these chosen subjects are undertaken and which Leaving Certificate programme to pursue all have implications regarding what pathways are open to people once they leave school (Banks & Smyth, 2011; McCarthy, 2013). Furthermore, Banks and Smyth (2011) indicated that choices made as early as first year in post-primary school often set the framework within which students can make future choices.

Career guidance counsellors have an important role in the transition process. McGuckin et al., (2013) states that the support offered by guidance counsellors was greatly valued by students with special educational needs. Other research identified that many people with disabilities do not get formal career guidance and of those that do many find the advice limited in relation to opportunities for people with disabilities (Vickerman & Blundell, 2010; Kim & Williams, 2012). Furthermore, studies have indicated that many students with special educational needs rely heavily on parents when making transition choices (McGuckin et al., 2013; McCoy, Smyth, Watson, & Darmody, 2014). Research has indicated that one-to-one sessions with career guidance counsellors are perceived as most beneficial to students (Banks & Smyth, 2011; McGuckin et al., 2013; McCoy et al., 2014). However, the availability and number of such sessions can be limited and when available are often confined to those in the senior cycle.

Increasingly students with disabilities are pursuing third level education opportunities, however, they are still less likely than their able-bodied peers to enrol in postsecondary education in Ireland and the USA (AHEAD, 2008; HEA, 2008; Newman, Wagner, Cameto, Knokey, & Shaver, 2010). Disability category differences are relevant in relation to postsecondary opportunities. In Ireland, vision impaired young people making the transition to third level education remains consistently low, with AHEAD (2008) stating that vision impaired young people were 50 percent less likely to continue to third level education than their able-bodied peers. This contrasts with findings from the NLT2 study (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 et al., 2010: 17). There has been a history of exclusion and missed opportunities among vision impaired people within both education and employment. Educational performance is a significant indicator of lifelong choices (Gannon & Nolan, 2005; Shah, & Priestley, 2011). Furthermore, AHEAD (2008) assert that until such time as there is actual equality of access to educational opportunities and qualifications we risk losing highly skilled people from the labour market. Policy and practice can either enable or disable transitions and it is acknowledged that transition processes can be complex and problematic for vision impaired young people (Shaw, Gold, & Wolffe, 2007).

#### Access to supports and resources

It is necessary for those providing supports and resources to recognize that each individual has unique needs and these can vary depending on situation and location (Dale, 2010). Consequently, in order to support vision impaired children and young people in the best way possible, an important initial step is to appreciate their own understanding of their abilities and the activities they consider difficult (Khadka et al., 2012). It is recognized that access to appropriate and effective supports and resources are essential for vision impaired people within mainstream education (AHEAD, 2008; Kinsella & Senior, 2008).

A range of supports and resources are generally available to vision impaired children and young people. These include: the visiting teacher service; resource hours; Special Needs Assistant and exam accommoditations. The visiting teacher service can be an integral part of the various transition stages experienced by vision impaired children and young people as they provide a continuum of support from time of referral through to third level education (Keil & Crews, 2008). Sharma, Moore, Furlonger, Smyth King, Kaye and Constantinou, (2010: 65) acknowledged that successful Visiting Teachers were ‘highly flexible and adaptive’ with an innate ability to work appropriately with both children and adults. In Ireland pupils identified as vision impaired are allocated a number of hours from a resource teacher and McCarthy (2013) observed that the allocation of these hours enabled participants to access more fully aspects of the curriculum where the greatest barriers were experienced.

Many vision impaired children and young people in both mainstream and special education settings receive classroom supports from Special Needs Assistants (SNAs) (Douglas et al., 2011). In Ireland their primary function is to provide a care role rather than a learning support role (Department of Education and Skils, 2007; Douglas et al., 2011). The discrepancy between what an SNA is perceived to be employed to do and what the vision impaired young person actually requires of an SNA can prove problematic. It has been recognized that to ensure that the supports offered by an SNA are most effective in meeting the needs of the individual pupil their ‘duties should be modified to accommodate the particular needs of the student’ (Department of Education and Science, 2007, p. 84). Research indicates that additional surveillance and control can be experienced by those who have an SNA (Mortier, Desimpel, De Schauwer, & Van Hove, 2011). Furthermore, it has been acknowledged that the presence of an additional adult in the classroom can also result in segregation and isolation from peers (Conroy, 2008; Mortier et al., 2011). Consequently, it is essential to assess the benefits of having an SNA against the social implication of such supports (Rutherford (2012).

Douglas, et al. (2011) assert that standard examination formats and procedures may pose particular challenges for vision impaired pupils. Consequently, accommodations are intended to level the playing field so that they can demonstrate what they know, without being hampered by inaccessible assessment procedures (Steer, Gale & Gentle, 2007). Furthermore, these accommodations are intended to promote equality of participation within education (Kinsella & Senior, 2008).

Peer support has been recognized by many as a significant source of support (Murphy, 2011). This is particularly valuable where the formal supports available are inadequate or insufficient (Wong, & Cohen). Peer support can be available at a variety of levels. Increasingly this can be achieved through on-line communities (Magennis, Murphy, Lazarov, Van Isacker, 2014) whereby support can be available on a range of topics. Wong and Cohen (2011: 142) have argued that if blind/vision impaired students are to appreciate the possibilities of electronic communication, ‘a network of users must first be in place’.

This literature considered some of the germane issues related to vision impaired young people and their access challenges in education. It began with a brief examination of relevant policy and legislation and identified that an inclusive position is now at the centre of educational legislation within an Irish context. Access to and participation in third level education for students with disabilities are considered key factors. It is recognized that a range of factors are important regarding access to the education system for blind/vision impaired young people. Central to this is the recognition that to include blind/vision impaired young people within mainstream settings adjustments to teaching and learning methodologies are essential. While access to the curriculum has improved, access to the maths curriculum continues to pose significant challenges for blind/vision impaired young people.

It is recognized that access to technology is increasingly important for blind/vision impaired people. However, there is an assumption that because of the presence of assistive technology mainstream technologies do not need to be accessible. Consequently, while software and hardware are designed and manufactured without appropriate recognition of their accessibility requirements vision impaired people will continue to experience significant challenges. The utilization of assistive technology provides people with disabilities the opportunity to undertake tasks that are routinely performed by able-bodied people. However, it is recognized that many young people with disabilities refuse to use assistive technology, as they do not want to be perceived as different from their peers. It is recognized that print material is an inherent element of the education system. However, it is apparent that for those that are unable to read standard print significant challenges still persist.

It is evident that adolescence is a time when significant transitions take place. In Ireland decisions taken at secondary school regarding subject choice, the level at which these chosen subjects are undertaken and which Leaving Certificate programme to pursue are significant regarding what pathways are open to people once they leave school. Consequently, engagement with career guidance counsellors is important and should be available throughout the students’ secondary education. The literature review concluded by considering the various supports availed of by blind/vision impaired young people, recognizing the importance of acknowledging that each individual has unique needs which can vary depending on situation and location. However, it is apparent that not all supports are provided in a way that meets the unique and changing needs of blind/vision impaired young people. This illustrates a need for greater flexibility in the allocation of supports/resources for blind/vision impaired young people to ensure that their specific educational needs are met in an appropriate manner.

### Methodology

#### Research rationale

This research aimed to investigate why young people with visual impairments were reported to be 50% less likely than their sighted peers to progress to third level education (AHEAD, 2010). To address this issue, the School of Education’s Inclusive Education and Society Research Group and NCBI’s Centre for Inclusive Technology organised a seminar to explore educational access for young people with visual impairments. For this first seminar digital inclusion was the core theme. However, as this seminar raised a wide range of access challenges, the scope for this current study was broadened to include the access issues most prevalent for post primary students in their transition to third level. This seminar was held in Trinity College Dublin’s School of Education with the Inclusion Education and Society Research Group on 31st January 2013. All stakeholders supporting students with visual impairments in post primary and third level were invited to participate in debating access challenges these students face. Most significantly, the event was designed for blind and visually impaired students to lead and facilitate discussions, through both individual presentations and in subsequent working groups. [[5]](#footnote-6) The student experiences and facilitated debate with all seminar participants, led to the development of four key research questions, which drive this pilot study:

1. What are the transition experiences of blind/visually young people moving to higher education in Ireland?
2. What are the experiences of professionals who are supporting these young people?
3. Are young people experiencing any access challenges that impede making an effective transition?
4. What suggestions/recommendations could be made to improve transition experiences?

#### Research methodology

This pilot study was designed to investigate the transition experiences of young people who are visually impaired and inform further more in-depth studies into this issue. As a result, qualitative research which emphasizes documenting “the world from the point of view of the people studied” (Hammersley 1992: 65) was considered the most suitable method. This preference makes this method an ideal match for the research goal of this study, as its investigative lens is sharply focused on the opinions, views and beliefs of the selected participants. This approach also offers as disability scholars Hartley and Muhit (2003:104) recognize “the opportunity of closing the gap between the science of discovery and the implementation of such discoveries”.

In selecting participants for qualitative research, Patton (2002) encourages purposive sampling as it allows researchers, to select “information rich” cases that manifest the phenomenon intensely. They are considered “information rich” when “a great deal about issues of central importance to the purpose of inquiry” can be learnt (Patton, 2002:1). For this study it involved selecting a range of blind/visually impaired students to reflect post primary transition experiences in Ireland today. Participants were selected and approached in consultation with professionals supporting these young people. Table A outlines each student participants’ educational stage and the family members and professionals who also participated in this study.

|  |  |  |  |
| --- | --- | --- | --- |
| **Student** | **Education stage** | **Family & Professional Participants** | **Interview time (Approximately)** |
| **Jack** | Transition year in large rural post primary | Mother, SNA, Resource Co-ordinator | 50 minutes |
| **John** | 6th year in large urban post primary | Parents, Visiting Teacher, Resource co-ordinator, SNA | 2 hours 10 minutes |
| **Sandra** | 1st year undergraduate student in a large urban university | Visiting Teacher | 1 hour 10 minutes |
| **Aoife** | 2nd year undergraduate student in a large urban university | College Disability Officer | 1 hour 18 minutes |

**Table A: Student participants’ education stage & their participating family & professionals**

All of the professionals supporting these young people have a vast range of expertise supporting young people with disabilities in education. In this study, these individuals shared experiences supporting both these particular students and other current and past pupils with visual impairments. In recognition of the critical role of family support, a representative from Féach, the parent group for visually impaired children was invited to participate. The National Braille Production Centre perspective is also shared in this study, along with additional perspectives from a school principal, resource teacher and Maths teacher from a school with a national reputation for supporting significant numbers of blind and visually impaired post primary pupils. In total, 18 semi-structured interviews were conducted.

|  |  |
| --- | --- |
| **Participants (parents & professionals)** | **Interview time (Approximately)** |
| Féach Representative | 45 minutes |
| National Braille Production Representative | 30 minutes |
| Sandra’s Visiting Teacher | 55 minutes |
| John’s Visiting Teacher | 2 hours 10 minutes |
| Aoife’s Disability Officer | 1 hour 15 minutes |
| School Principal | 30 minutes |
| Resource Teacher | 1 hour |
| Maths Teacher | 40 minutes |
| Jack’s Resource Co-ordinator | 1 hour |
| John’s Parents (interview with John) | 2 hours 15 minutes |
| Jack’s Mother | 25 minutes |
| John’s Resource Co-ordinator | 1 hour 20 minutes |
| John’s SNA | 20minutes |

**Table B: Parent & professional participants & length of interviews**

All of the student interviews took place face-to-face. John was interviewed along with his parents in their home. Jack was interviewed with his SNA at his school. Aoife was interviewed at her college campus and Sandra was interviewed in her hometown in a local café. Three Skype interviews were conducted with professionals. These were with both visiting teachers and the disability officer. All of the other professional interviews took place face-to-face in locations convenient for the participants. All interviews were digitally recorded and transcribed.

Flexibility was key not only in the interview structure but also given the restrictions on family and school personnel work and personal commitments, it was essential for the co-ordination for all of the interviews. Interviews generally lasted just over an hour. However, given the flexible interview structure, we did not strictly adhere to this timeframe. For example, the interview with the school principal took just under 30 minutes, during her school lunch break, while an interview with one student and his parents took place in their home on a bank holiday Friday evening. This interview lasted almost 3 hours. The duration of this interview is indicative of the general eagerness, especially among students and their families to raise and voice their concerns and most significantly to have these concerns documented and shared with the wider public.

A case study approach was considered the most effective method to capture the qualitative data. In composing the student profiles for this study (Section 4), the strategy was to weave in the qualitative data shared primarily by the students themselves according to the emergent themes. While supporting information from family members and professionals is also included, the individual profiles aim as much as possible to, ‘give voice’ to these students’ particular concerns, beliefs and experiences. Documenting the supporting perspectives from the wide range of professionals is presented in Section 5 in a thematic analysis format. This method is chosen to support and complement the student profiles, while also presenting emergent recommendations.

# *Introducing the Students*

## Jack

Jack is a sociable confident Transition Year student with a visual impairment, at a large rural public post primary school. Throughout his education he has been well supported by his family, who are very proactive in engaging with his school and other national support services for people with sight loss. Jack is linked in with Irish Guide Dogs and attends their life skills course, which focuses on independent living skills, such as mobility and cooking, which he enjoys. At school, Jack is supported by his special needs assistant (SNA), Mary, who accompanies him in all his classes. He has a visiting teacher, who has supported him since primary school and with whom he has less regular contact. Her role is to link in with the school to ensure he can access the curriculum.

Although when he was in primary school he learnt Braille, he no longer does. Instead his resource hours are dedicated to improving his maths and spelling. Mary helps him access learning by taking notes from the board, ensuring the curriculum is accessible and equipment is set up and working. Mary is keen for him to devote time during his transition year to improving his Braille reading. In class Jack uses an Opti Verso camera to access the curriculum and has been using it since 6th class in primary school. While it is an excellent support for accessing classwork, he finds it quite “*awkward*” and wonders whether there would be another assistive technology option for him to access the curriculum. Aside from being a cumbersome piece of equipment, it often breaks which can cause considerable stress, as while he waits for it to be fixed by the manufacturer, he cannot access the entire curriculum: “*This (the arm of the Opti Verso) continuously snaps. It goes away and it takes three weeks to come back…it’s very, very difficult*.” When Jack is without the Opti Verso, he must rely on Mary to take notes during his classes and after school he has to go over all the class work, with his Andromeda at home:

“*So I just go home and do it all then, like go back over everything I did in school yesterday. You would be wrecked*.”

Mary arranged a meeting with Jack’s mother, visiting teacher and the School principal to request a second Opti Verso, to be stored on standby for the Junior Certificate, just in case it broke down. This has since been arranged for Jack, which is a great relief:

“*it’s just good to know there is another one around, if this one breaks in an exam*”.

Jack is keen to find new technology support before going to college as he “*can’t be carrying that around, like, it’s too big and awkward*.” Working with his SNA during his upcoming transition year, a priority is to investigate other options. Like most of his classmates, at this stage in his education, he is not sure about his career choice, but he is considering third level education opportunities in Dublin and has already been to a couple of open days. It was through his network of friends made at Camp Abilities that he has learnt about the latest assistive technologies and education options from other young people with visual impairment:

“*You’re around other people who are visually impaired and they’re going through the same stuff as yourself so it’s kind of nice for that. And you do find out more about, like, what’s out there, different organizations like….as I got older I heard about Child Vision … and then there’s Vision Supports and they had their weekend actually up in Dublin, which I was at over the weekend*”.

## John

John is a bright and diligent 6th year pupil with a visual impairment, currently preparing for the Leaving Certificate at a large urban secondary school. John acquired his visual impairment towards the end of his primary school education. He has many hobbies and interests both in and outside school. Academically, he enjoys business studies and music, while by his own admission, struggles with maths and spelling. John’s parents are very supportive of his education and are proactive in engaging with all professionals supporting their son, in particular with his Special Needs Assistant (SNA) Mary, the school’s special needs coordinator Maura and Sarah, his visiting teacher.

John and his family feel especially well supported by Sarah:

“*We’re fortunate in the position that the visiting teacher lives a few hundred yards away, she is very helpful, she has come down here on loads of occasions and at this table she has taught John to do various things, like using that calculator*”.

They are acutely aware of the close proximity of their visiting teacher to their own home and how this plays a significant factor in the level of support John receives, and that other students may not be as fortunate. Given the visual nature of maths and as John was struggling with the subject, his visiting teacher recommended that his resource hours be solely allocated to supporting him with his maths course work. Typically John has these resource classes during physical education class times. John enjoys sports outside school. However, at school there are limited opportunities for him. His first year at secondary school represented a very challenging adjustment, both academically and socially. Despite feeling social isolation due to disability related challenges such as mobility and orientation within a large school, John has now settled well into secondary school.

John accesses the school curriculum principally through Braille. Accessing the curriculum materials involves Sarah liaising with his school teachers and his SNA Mary to order Braille versions and text files from the National Braille Production Centre. In general, his books are delivered in time for the start of each term. However, on occasions when there have been delays caused by last minute curriculum changes, this has caused him a great deal of distress and frustration, as he explains:

“*There were problems, however, with some of the Braille books, especially in French for a couple of months I was left with no book pretty much in the classroom….Mainly just because the books that would have been used for class were changed at the last minute, really, and that was a bit of a problem….I mean, I've noticed myself I've even, in terms of grades and that, I mean it was a lot harder to study, I was almost looking for something to do in class because I couldn’t really follow well*”.

Communication breakdown between all the school personnel involved is identified by John and his parents as the root of the issue, and they feel they are ultimately the ones responsible for coordinating communication:

“*We primarily had to try and co-ordinate communication between all these people. Seven individuals* *(John’s mother)* …*We found there was probably too many people involved and everybody thought everybody else was doing something else, and I mean it was very disappointing*.” *(John’s father)*

Ultimately, the person who is impacted is John, as he reports:

“*It’s quite frustrating and also quite disappointing to be honest, because as any student I trust my teachers, you know, and even in, take, say, today, in French class, I was sitting there putting my hands out, what can I do,... you know, I mean, because even if the book wasn’t there, I don't think it’s really too much to expect for the teachers to give you alternative work*.”

Since completing the Junior Certificate two years ago, John has been planning with the support from his parents and visiting teacher for his transition to third level education. It is not common practice for visiting teachers to participate in transition planning, as their role is focused on primary and post primary access to curriculum. Due to his health condition, John repeated a previous school year so has decided, along with his parents, to continue into fifth year. Although, John’s parents suggest that John would have benefitted from a transition year, which focused on transition planning for his specific needs, exploring different technology supports, extra tuition in Braille and Maths and independent living skills; this, unfortunately was not an option:

“*Once Maura was saying that transition year would be great for him … and we could do more Braille stuff and get extra support with weak subjects, but then we were having a meeting with the* *school about other issues, we realized that the resources aren’t there, the money’s not there and there's no way we could tailor make a package for John for transition year, you know…I'm just saying, for somebody with disability or whatever, transition year could be great, you could do your mobility skills down in Cork, you could do your one to one in your maths… because they’re the subjects that you want to do for fifth and sixth but there's no way that school was going to tailor make, they just wouldn’t be in a position to do it. (Mother)* …*It’s an opportunity….independent living skills” (Father)*

At school, career guidance is limited to all class discussion and instructions about the CAO application. John’s father’s understanding is that no extra support is in place for students with disabilities for transition planning:

“*I would say the fact that John has little or no career guidance was probably not all that different to his older brother…I don’t think it’s a factor because he is blind*.”

John and his parents have been very proactive in meeting with third level education institution disability services. Overall, they have found the experience worthwhile, but warn in their experience, the reception and support on offer for students with disabilities varies from institution to institution:

“*Very non-standard, everything is specific when they teach …it varies from college to college, and supports vary. DARE programme is quite different from one college to another and it doesn’t happen in some*”

John and his parents have visited several colleges and are weighing up options between local and larger third level institution options. In some larger institutions, John felt the adjustment could be overwhelming and he might just be ‘*a number*”. At one institution of technology they “*came out walking on air, we thought oh my God, they're really bending over backwards, they really had a kind of holistic approach to the student, it wasn’t all academic, it seemed to be very much like the door is open and if there's any problems*”. *(John’s mother)*

As John’s father recognizes this was their individual experience, another student and their family may share a different story:

“*Again, that was our experience, you could get another group of people in and they might be completely different*.”

Nevertheless, the positive openness of the meeting with that institution and their willingness to listen to John’s needs was encouraging for both John and his parents:

“*You felt the important thing for me anyhow coming out of it was that John felt, you know, there's a possibility here, because you know when you’ve got your Leaving Cert hanging over you and all, just to kind of know there’s something out there for you…*

*(John’s mother)*

*“It’s not the end of the world*.”

(*John)*

## Sandra

Sandra is a 1st year Law student with a visual impairment, studying in a large third level institution. Last year she chose to leave a health based course at a different large third level institution in her home county. Achieving independent learning is very important for Sandra. Disclosing her visual impairment has been a challenge for her during her transition to higher education. Throughout her primary and in particular her post-primary education she has been offered mobility training. Sandra however, has struggled with accepting the need to use a cane or work with a guide dog. During primary and secondary school Sandra was supported by the same visiting teacher Nuala with whom she had a strong relationship with ‘*because I had known her for so long, she’s like a friend, like I wouldn’t treat her like a normal teacher, I’d just say whatever I wanted to say*’. Sandra was assigned a special needs assistant (SNA), however no formal individual education plan was developed for her, instead:

“*I think it was more gradual, like I found out what I needed as I went on…Nuala my visiting teacher would come up every few weeks and I’d just tell her what I needed, and then she’d go and try to sort it out*”.

Initially Sandra found her SNA was in the class with her when she often did not need extra support:

“*At the start she was doing too much and I was just like, no I can’t be having this… so I just made sure she was only with me for Maths to take down notes from the board…. I had a lot of equipment, so she’d help carrying that around from class to class*”.

Ordering books in alternative format requires a several month lead in period and any delay in confirmation of textbooks will impact on books being available for visually impaired students. Confirming the booklist with the school caused Sandra considerable stress as she was occasionally without curriculum books:

“*I didn’t have my books, that took ages. I have to get my books on Tech Spell…I’d tell the visiting teacher what books I needed…I’d try to get the booklist as soon as I could…like that was a big thing, knowing what books I have then trying to get the booklists off the schoo*l”.

Sandra had a nerve-wracking experience sitting the Junior Certificate exams “*I found the exams in Junior Cert so stressful and things kept going wrong in the exams, like, they’d bring the wrong papers and it was just the exam people kept screwing up and everyone was so stressed, like people that were working with me. And I was really stressed and I was running out of time*”.

This impacted how she handled her 6th year in school. Her full attention was on her Leaving Certificate preparation and little attention at school was given to transition planning. With her visiting teacher the emphasis was centred on exam papers, as she notes, “*I don’t think they have much to do with college, they’re only to do with the school, so I don’t ever remember talking about next year, it was more all focus on the Leaving Cert and how I was going to get through that, there was enough to deal with, with all the papers and all that*”.

Preparing for her Leaving Certificate, as a student with a visual impairment Sandra was consumed with her exams and ensuring all the papers would be accessible, there was little time to consider what higher education challenges may arise, as she reports:

“*I was busy during the Leaving Cert, thinking about all of these obstacles, like when you’re doing your Leaving Cert everyone is like - “oh college is going to be great like, this is the hardest time of your life,” ….you just don’t really think about the issues*”.

Sandra thinks her transition to third level would have been less problematic if there was a more formal communication established between post primary and third level. At her school, Sandra felt career guidance personnel could be more informed about specific disabilities to support students with their transition to further and higher education. Sandra believes there is a need for formal liaison between the school and college to assist with the transition process.

Advocating for herself and planning her own transition was very important for Sandra and symbolized her efforts to lead as independent a life as possible. So in spite of her parents offers of support, she did not want them to accompany her to open days or liaise with the college Disability Support Services (DSS): ‘*I wanted to do everything on my own. I was like, I’m independent and I don’t want my mum ringing up for me*’.

Consequently, Sandra contacted the college Disability Support Service (DSS) herself during the summer to enquire about access to curriculum and the supports available. She was disappointed by their reaction, as she reports:

“*They don’t give you much help before you register, I rang them up during the summer. The DSS, they were like, “oh you can’t do anything until you start in September” and we won’t talk to you basically. And I was like “sure it’s too late then because my lectures will be starting and I’ll have nothing in place, but that’s just their attitude*”.

On reflection, Sandra thinks having her parents advocate on her behalf as well, might have resulted in receiving the supports she needed at college. This is her opinion because she has met a student with a visual impairment, who having heard about Sandra’s experience, ensured her parents went “…*with her, and I think they’re putting pressure on, so she’s going to get everything in place now, before she starts. And that’s obviously because her parents are with her, because like, they wouldn’t listen to me when I asked them for that*.”

From the outset, lecturers were dissuading Sandra from taking their subject, as it required observational examinations:

“*I* *met with some of the lecturers…the first week…they were so negative from the first thing, they were like, coming out with all these things they were going to do, like, how are you going to do eye contact and how are you going to interact with the children, and there was all this observational examinations…And then I wanted to drop out straight away*”.

Without the correct supports in place Sandra struggled to keep up in lectures and became increasingly anxious as it neared exam time:

“*I just couldn’t do the course anymore, it was such a struggle to get any help, like books technology and I used to go home every night upset. I tried to make a compliant through the student welfare office and they didn’t help much…it was coming up to my exams and I still had no accessible notes*.”

At Christmas time, Sandra chose to leave the course. In contrast to her experience at her local university, from her first meeting with her second choice university DSS, she felt welcomed and assured that they could help her find out particular supports that best suited her needs.

“*I went to the DSS and I had like a huge list of questions typed out. She talked for a few minutes and I didn’t actually have to ask her any of my questions cos she answered them. I thought it was great, … they find out what suits you best, whereas in the other place, it’s like, what do you want and I just said the same thing I had in school cos I didn’t know there were other things available*”.

Sandra is now almost finished her first term at her new university. Another change for Sandra has been letting people know straight away about her visual impairment, which she feels has helped her boost her confidence and adjust to campus life both socially and academically.

## Aoife

Aoife is a determined, independent, young woman with a visual impairment. Throughout her education she has been well supported by her family, especially her mother. Life in secondary school was incredibly challenging for Aoife, as she experienced access barriers to the school curriculum and felt socially isolated because of her disability. While Aoife recounts positive experiences with individual teachers committed to her academic progress who facilitated her access to course materials, she felt their efforts also highlighted the inadequate support from the special needs resource team at her school. Aoife attributes the poor support towards enabling her full participation in both the school’s educational and social life, to a lack of a real appreciation of her needs:

“*All through school it was really very difficult, because I felt like the head of resource, the whole resource team, the SNAs, they didn’t really have much understanding of the needs of a vision-impaired student or even a student with no sight at all*”.

Based on her academic support needs due to her visual impairment, Aoife was assigned an SNA to support her in the classroom at all times and an individual educational plan allocating her 4-5 resource hours was agreed. Sadly, these recommendations were not respected, as she recalls:

“*An individual education plan was drawn up when I started first year .., I was entitled to about four to five resource hours a week and of course it didn’t really turn out that way, and unfortunately I'm not really sure the reason why, but it was just suddenly put into the background and it got all forgotten about. I did have a SNA helping me in class for a while until I got my Opti Verso got working and then I was left in class by myself .. using the Opti Verso*”.

In practice, Aoife received one hour of resource teaching support per week for extra maths tuition which she felt was inadequate, and consequently impacted her dropping Honors Maths for the Leaving Certificate, as she explains:

“*I only got an hour of resource for maths … it wasn’t much of a help because it was two half-hours a week and you wouldn’t get that much done in a half hour, you know, like, when the hours were there, I felt, you know, I should have been entitled to them; to be able to sit down and be talked through things properly because I had a lot of difficulty with lots of things in that area…I ended up going back to pa*ss”.

Aoife identified inadequate communication and co-operation between SNAs and school personnel, plus a lack of training in specific disabilities as often being the cause of poor support and disputes:

“*I would say for SNAs to get proper training in dealing with different types of disabilities…to have good communication between student and teacher and visiting teacher…there were big lapses in communication and it caused arguments*”.

Another particular difficulty for Aoife, was the lack of access to the most suitable technology:

“*I was using a very old laptop…. and I remember the screen on it was cracked and it caused a lot of problems, like, the camera and everything, trying to see the board and things was a huge challenge*”.

Aoife credits her visiting teachers’ (she had two during her post primary education) help in securing critical reasonable accommodations to access Junior and Leaving Certificate examinations:

“*Unfortunately, there wasn’t enough technology available for me to be able to do my homework successfully or being able to type stuff except when it came to, like, Junior Cert exams when I finally, like, I was able to use the laptop for typing exams and it was thanks to the visiting teacher…It was thanks to her that I got all my special recommendations, my use of a computer, having a scribe for Maths because Maths was a huge challenge for me*”.

Aoife feels there was no planned pathway to higher education for her at school but it was she herself who initiated her transition through linking with outside agencies such as the Irish Guide Dogs and a particular university DSS support worker. As she asserts: “*I went looking for them.. I took it upon myself…to search out the DSS”.*  Career guidance at school Aoife thinks could be managed on a one-to-one basis *“especially for students with disabilities, like hold individual appointments… help them with their transition rather than having them do it all by themselves*”.

In particular, Aoife also highlights peer support from an undergraduate student with a visual impairment who was a guide dog user as “*one of the people that saved me…she really built me up*”. As Aoife had a lack of peer support at school “*I didn’t have any peers at school, I was very isolated, the whole school looked down, kind of discrimination, I guess, so I had no support apart from family and outside friends*”, this friendship proved very significant for her. They met at an Irish Guide Dogs open day. This student had faced and overcome similar access challenges, as Aoife was experiencing. Aoife cites her as a huge inspiration for her both emotionally and practically, spurring her on and helping her to plan her transition, start training with a guide dog, find out about technology support and funding entitlements with the support of the local DSS.

Currently in 2nd year taking an Arts degree at a large urban university, where she lives on campus, Aoife is thoroughly enjoying her academic and social life. She is living independently near campus, performing exceptionally well in her course work and has made a wide circle of friends. Aoife voices strongly that she “*worked her backside off more than most students*”, massively determined not to “*repeat the Leaving Cert and have to go through the whole thing all over again”*. Reflecting on her situation, she acknowledges that her proactive and determined nature to find out about and fight for her access entitlements and opportunities is not universal, and that not all students with disabilities have this capacity:

“*It is worrying, it is a worry because a lot of students with disabilities are very vulnerable and I know I am a determined person but not all disabled students are like that, they need help from their supporters*”.

Access to appropriate support and technology at college is having a tremendously positive impact both academically and socially for Aoife. She beams as she explains the difference between life at school and college, while there is also an echo of regret for the support that was absent for her at school:

“*When I found out I was coming here… I remember hugging my mam and jumping up and down. And I got straight onto Bernie (college DSS), “Look, I got accepted, let’s get the ball rolling, let’s do this thing.” The whole experience was way more positive, like, when I first went in, my very first meeting with the disability officer was there offering me all these things, I was like, ‘Oh my God, why didn’t my school do this, like?” And half of them didn’t even know it was possible. I mean like the iPads and everything, but sure there was no way they’d allow an iPad in school.*”

Equipment funding provided by the college DSS is crucial for Aoife:

“*I have funding for the note takers, also for my laptop and my iPad… It’s hard, I certainly couldn’t afford it myself*”.

At school she believes there is a lack of awareness about financial supports available at third level: “*schools aren’t aware of it and I think they should be*”

Sharing her transition to higher education story and lessons she has learnt with others, Aoife feels is a positive way to help other students who may be struggling. Her top tip for students with visual impairment at college is to accept all supports available “*make use of the note takers…get your lectures recorded..*.” and most crucially “*communicate frequently, not just with the DSS but the lecturers*”.

# *Key Findings*

## Introduction

This section is a synthesis of the analysis of qualitative interviews with all research participants. While the student profiles section focuses on the individual student experiences, this section brings together the student voice with the perspectives and experiences of the professionals providing their educational supports. These include visiting teachers, resource co-ordinators, SNAs, NBPC, Féach, parent association for visually impaired, school principal, resource teacher, maths teacher, and a university disability office representative. The aim is to weave the real lived experiences of the students and their educational supports in their own words together to highlight the most critical areas including good practices and areas of concern for them.

The earlier literature review provides a solid framework to support and examine the key areas for analysis. This section presents the analysis of the most salient key issues voiced by participants within this framework. These key areas are as follows:

1. Access to supports and resources (e.g. visiting teacher service, resource hours, special educational assistants and exam accommodations).
2. Access to curriculum, including specific problematic subjects highlighted by participants Physical Education and Maths.
3. Access to print material.
4. Access to technology.
5. Access to transition opportunities and planning (e.g. career guidance, parental role, linking in with outside agencies including third level, facilitating access to peer support).

## 1. Access to Supports & Resources

This section presents the analysis of data in relation to access to resources and supports in post primary schools. Each of the students in this study has unique needs, which can change on an on-going basis, depending on their personal and medical circumstances. Following student needs assessments, access to supports and resources are agreed and allocated by the National Council of Special Education and co-ordinated by individual schools. All of the students are entitled by law and currently have access to the visiting teacher service; special needs assistants and exam accommodations.

The key supports and resources areas identified were:

1. The absence of the Individual Education Plans (IEPs).
2. Special needs assistants (SNAs) specifically recognised for blind and visually impaired.
3. Insufficient resource allocation to support visual disability needs.
4. Visiting Teacher Service collaboration with SNAs.
5. Concern about possible future reduction of SNA provision for blind and visually impaired students.
6. Time management issues in exams.
7. Increase awareness about exam paper modifications.
8. Reliance on parental and teacher support.

The landmark legislation, the Education for Persons with Special Educational Needs Act (EPSEN, 2004) legislated for statutory obligation on schools to introduce a system of Individual Education Plans (IEPs). Owing to economic restraints and lack of budgetary priority, this significant component of the Act has not been implemented.

The absence of the IEP in each case impacts resource provision and the development of a fully-fledged transition plan (McGuckin, Shevlin, Bell, & Devecchi, 2013). Consequently, two interrelated issues dominate participants’ (both students and professionals) access to resources and supports experiences. They are; 1) the perceived insufficient amount of supports and resources currently allocated to provide for their visual disability; 2) the experience of “fighting” for or to maintain these resources. The lack of IEP provision prompted the students’ school personnel in this study to adapt their own student plans for students with disabilities. None refer to them as IEPs. John’s resource co-ordinator’s experience is reflective of this study’s students’ experiences:

*“The reality of life on the ground is that if you try to write an IEP and implement an IEP the way it should be done, the resources aren’t there to do it properly…along the lines that it’s described in EPSEN, and in the documents. So I choose not to call our planning in the school ‘IEP’, because I wouldn’t stand over it. It’s not an IEP in the manner in which it is described – and the way it is envisaged – in EPSEN. However, we do write what I call ‘student support plans’. It’s in essence, our version of an IEP. It’s a working document. As I say, it doesn’t tick all the boxes that EPSEN has…looking to identify priority needs for … how we’re going to provide for those; setting targets; doing all of the things that an IEP does … but not in the amount of detail…”*

Given the restrictions to developing a detailed plan, as recommended by the EPSEN Act (2004), the students automatically receive reduced support, as their educators have less or no allocated time to discuss individual cases, and in all cases special educational needs assistant (SNA) support hours have been reduced significantly.

The following account by John’s resource co-ordinator echoes all of the student experiences in this study. It is their shared experience of frustration with poor resources to provide for students’ needs due to their blindness/visual impairment:

*“There is no provision for meeting time, whatsoever. We’ve gone through a cut in resource hours; we’ve gone through a cut in hours for planning specifically; we’ve gone through cuts in SNA support. John would have started off on full support; at the moment now he has access…it is ridiculous to think! Honest to God! He’s mainstreamed into a mainstream school, and he is given five extra classes of support. To my way of thinking, that is absolutely ridiculous.”*

***Professional perspective: Fighting… to maximize the resources for the students***

From the resource coordinator perspective, they are *“fighting...to maximize the resources for the students”* which in practical terms, involves *“ad hoc arrangements. You’re all the time cutting and jutting and fixing; borrowing from Peter to pay Paul, and then paying him back next week – your head would be melted.”*

John’s visiting teacher acknowledges the school’s determination to maintain John’s resource hours, however, she is quick to highlight that even this perceived maximum amount of support falls remarkably short of adequately providing for the needs of a blind student:

*“Because the school were adamant that they would not reduce his supports and they did not reduce his supports, he has still got the supports that he required. Now, being a blind student he got what they were allowed to provide, but I mean there is a heck of a lot more that a blind student requires, which time wise with all his subjects he just couldn’t avail of.”*

John’s resource co-ordinator concurs with John’s visiting teacher’s perspective:

*“He’s getting the absolute maximum that we can provide, given the resources we were given. Do I think it meets his needs? No I don’t.”*

***Student perspective: “struggle to get those hours”***

The students in this study are acutely aware of the on-going battle to secure and maintain resources and support. Sandra remembers the challenge to maintain her allocated two and half hours resource per week to support her visual impairment needs at post primary:

*“I had five classes a week, I think. So I think that worked out at about two and a half hours or something. But it was kind of, then … when I went into the senior cycle like, there were more and more cut backs, so it was like a struggle to get those hours, but thankfully I got them in the end but they were trying to take them off me and stuff.”*

Aoife also recalls the trauma of fighting to ensure support from her SNA in post primary. In her situation, once she was provided with her Opti Verso, the principal assigned her SNA to another student. Aoife attributes inadequate classroom support to a lack of understanding about visual disability, which consequently led to no real development of a support plan to provide for her needs:

*“I mean it was all through school it was really very difficult because I felt that like the head of resource, the whole resource team, the SNAs, they didn’t really have much understanding of the needs of a vision-impaired student”*

In her situation, despite initially having SNA support, once she received technology support from the Opti Verso, her SNA was reassigned to another student:

*“I was entitled to about four to five resource hours a week and of course it didn’t really turn out that way, and unfortunately I'm not really sure the reason why, but it was just suddenly put into the background and it got all forgotten about and I did have a SNA helping me in class for a while until I got my Opti Verso got working and then I was left in class by myself”.*

***Student perspective: “everyone has to be treated equal”***

All of the students are sensitive to the reality that in their schools there are other students with a range of disabilities. During the interview with John and his parents, while discussing the challenges he experiences accessing the curriculum, in particular access to Braille materials, he questions whether the fact that the SNA supports several students could hinder their level of support; “*a case like where an SNA would have charge of a number of kids, not just, sorry students, not just one student and that is the case with the SNA I have, I think including myself there's three students. I just think that’s worth a mention*.”

Even though SNAs are often assigned to more than one student, Aoife asserts, this should not be an access barrier, as all students needs should be equally met:

*“They were prioritising, I suppose, students with more serious conditions and that’s fair enough but everyone has to be treated equally too…without the support it was hard to access things”.*

In particular, John’s visiting teacher, specifies an exact amount of a *“minimum of ten extra resource teaching hours”* for blind students at primary school with the potential of reducing the hours should the *“student’s needs be met”.*

To explain the need for this significant increase in resource allocation, she describes the additional learning blind children in particular must undertake to level the playing field with their sighted peers:

*“Our blind students they start on day one, they have to learn Braille, they have to learn tactile diagrams. As they move up through the school, they learn technology, as they move say in to Irish, they have Irish Braille and English Braille and mathematical Braille, as they move forward say they have language Braille, German Braille, French Braille, Music Braille, Science Braille and they are all different codes. Then the technology is changed, then you are in to word processing and you are in to spread sheets and you are in to databases and then you are in to all your sort of, your Braille computer technology…if they got their 10 hours at primary, okay they would then have their skills learned, you know.”*

Furthermore, she suggests this may not need to be on-going ten hours throughout the student’s education, there could be the option to *“reduce it at secondary if the student’s needs were being met.”*

***Team approach in inclusive education***

Commitment to a team approach is strongly advocated by the principal of a school with “*a long tradition of teaching blind and visually impaired pupil’, recognises an “inclusive school” requires a “team focused approach with the classroom teacher, SNA, resource, career guidance…working together*” to make as far as possible, the mainstream as “inclusive through the teaching and learning materials and methods”. This team-focused approach is connected with the school’s inclusive education policy to provide students with the IEP. Embedded in this policy, is the commitment to carry out “care meetings once a week” (School Principal). The purpose of these meetings is for the school support team to meet to discuss the students’ ongoing and changing needs and modify supports accordingly. Ensuring students disability needs are being supported by sufficient resource hours fundamentally needs to be balanced with appropriate inclusive education policy and provision in the mainstream classroom.

### **SNA role for blind and visually impaired students’ needs to be “recognised as being different”**

The primary function of the special needs assistant (SNA) is to provide a care role rather than learning support (Department of Education and Science, 2007; Douglas et al., 2011) *“duties should be modified to accommodate the particular needs of the student”* (Department of Education and Science, 2007, p.84). All of the participants recommend that the SNA should be acknowledged as a personal assistant (PA) who also provides learning support, as John’s mother and John himself recognise:

*“The SNA is, you know like for most kids in school that have an SNA, it’s for the care things, do you know what I mean, even when you're applying it has to be the care thing and we've been trying to make the case that the role of the SNA for a blind student, it’s different, it’s like a PA…kind of thing and that that role should be looked at and recognised as being different*.”

John identifies his SNA as providing him with essential learning support:

*“I think it is very helpful, especially for taking down notes because I mean I'm using a Braille apex which is grand but it’s just, you know, I'm slightly slower than the other kids in the class so she's there to help if I've missed anything, ‘Yeah, you missed that,’ brilliant and the apex... Because, like, I do also have a spelling problem and I don’t really think that it’s true all the time, just in some subjects, so yes, the SNA would help me with that as well, you know, and for studying and for notes as well*.”

SNA support for blind and visually impaired students is a varied role, which includes producing their curriculum in alternative formats depending on their needs (e.g. Braille, enlarged print), as John’s visiting teacher explains:

*“Their SNA is not specifically sitting at the blind child’s side, they could be down in what we call in many schools, the Braille room. They could be preparing the worksheets and the hand-outs and the diagrams and everything else that is required*”.

Critically, she is concerned that there is; *“the promise that the child is going to be fully supported”* even if they are *“not physically at their side, they are metaphorically at their side. At secondary level quite a lot of the work is going on in the background”.*

### **Visiting Teacher Service collaboration with SNAs**

The Department of Education and Skills provides a visiting teacher service for children who are blind/visually impaired. Visiting teachers (VTs) are qualified teachers with particular skills and knowledge of the development and education of children with varying degrees of visual impairment. The service offers longitudinal support to children, their families and schools from the time of referral through to the end of post-primary education. Each VT is responsible for a particular region and is allocated a caseload of pupils. In this study both VTs supported over a 100 students ranging from babies, pre-schoolers, primary and post primary pupils. Given their continuum of support VTs can play an integral part in various transition stages for blind and visually impaired children and young people (Keil & Crews, 2008). The VT supports the children, parents, guardians, teachers and other professionals involved with the child. The frequency and nature of support takes into account a range of factors based on the individual needs of the child. The work of the VT involves liaising with other professionals and agencies such as audiological scientists, ophthalmology services, speech and language therapists, low vision specialists, psychologists, early intervention teams, school staffs, and with parents (Department of Education and Skills, 2015).

One of the visiting teacher’s core roles is to work closely with the school supports, especially the student’s designated SNA, to enable the SNA to provide appropriate support both in and outside the classroom to ensure the curriculum is fully accessible.

In this study, a key issue raised by the visiting teachers was for individual SNAs to be attached to the visiting teacher service, as John’s visiting teacher suggests:

*“If it was an employment like we are, a service, you know, if attached to visiting teachers for visually impaired, there could be a service for, you know, a Special Needs Assistant for visually impaired”.*

Sandra’s visiting teacher agrees, and explains that a “bank of skilled SNA people” would have measurable positive outcomes for blind and visually impaired students:

“*She had supported a blind student and had done the Braille course and had been an amazing SNA and, you know, is still working in that school, the child has left and she is now working with different kids and, you know, obviously I’ve got to know her well over the years but I was just saying it would be wonderful to have a bank of skilled SNA people.”*

*Sandra’s visiting teacher believes in the benefit of linking SNAs to share information on how to best support students’ needs:*

*"I’m trying to put her in touch with another SNA who is now supporting a child who is … a Braille kid at secondary school…you really need to talk to this person to kind of get - not just me telling you what’s involved, but to get it from somebody who has been through to Leaving Cert supporting a student and you know, what worked, what didn’t work…. So the skill isn’t going with the students”.*

The key motivation for recommending a *“bank of skilled SNAs”* is to maximise opportunities to retain specialised knowledge to support blind and visually impaired young people make the most effective transitions possible.

***“Supports are being withdrawn and whittled down”: Concern for future provision for blind and visually impaired students***

There is concern among many of the professionals interviewed about the reduction in support for blind and visually impaired student in post primary schools. As John’s visiting teacher reports:

***“****Like the lad I was doing the CAO form with there last week. I actually said to him, thanks be to God, you got your education when you got it, because all the supports are being withdrawn and whittled down”*

John’s visiting teacher’s reaction to the Department of Education and Skills recent circular reflects the concern of visiting teachers, representatives and resource co-ordinators in this study.

The Department of Education and Skills recent Circular 0030/2014 to the Management Authorities of Primary Schools, Special Schools, Secondary, Community and Comprehensive Schools and the Chief Executive Officers of the Educational Training Boards, addresses the issue of “*The Special Needs Assistant (SNA) scheme to support teachers in meeting the care needs of some children with special educational needs, arising from a disability*”. While certain aspects of the circular are commended, for instance the inclusion of the “*importance of paying cognisance to the viewpoint of the child in reviewing the level of access to SNA required*” which is set out at (Section 16: The View of the Child). It is the proposal for “*quantum of SNA provision*” for all students with disabilities and for the decision for SNA allocation to rest solely with the School Principal that has caused considerable concern for participants in this study (in particular, the Parent group representative, the Visiting Teacher Service representatives and resource co-ordinators).

John’s visiting teacher highlights the main issue with the circular is that the proposed model of provision is discriminatory:

*“It is done from a philosophy, all special education, the model of provision is a behavioural model, rather than a disability model…it is the pyramid model.”*

According to John’s visiting teacher this type of model of provision is an inherently inappropriate educational provision for blind and visually impaired students, as it translates as:

“*High supports initially, tapering off to absolutely nothing and that is a one size fits all for everyone, but that definitely does not suit our blind. Plus, they have taken our blind and put our blind in with the generic disabled, if you want to put it that way and have made it so, they will not get the supports that they require.*”

John’s visiting teacher specifically highlights the issue of reducing support as the child progresses from 3rd class to 4th class:

*“In that circular it states that the model of provision is that you will get your supports up to about 3rd/4th class primary, after which the decision will be taken whether to continue with the supports, with a recommendation in the circular that from 4th class primary the students should not have support. So you can imagine how well a blind student is going to fare in that...it is going to destroy the education of the blind in Ireland.”*

### **More time required to access exam materials**

A key access area for senior cycle blind and visually impaired students, is ensuring exam materials both preparatory (e.g. mock papers) and official exam papers are accessible and that adequate accommodations are made for taking exams e.g. extra time, scribe, and technology supports. The visiting teacher service is in place to support students securing accessible materials and exam accommodations. All of the students in this study are/were connected to the visiting teacher service for this support. A common challenge for blind and visually impaired students during exams is time management.

Aoife describes her struggle with time management and the lack of understanding about the extra time she required for exams, as she explains:

*“It was very hard especially for me for time management, there wasn’t much understanding there with regards to me writing four essays. It was only ten minutes per hour at Leaving Cert, I was lucky to even get the ten minutes per hour because … at one stage that the department were only on about giving me ten minutes in total extra because …we’re entitled to rest periods as well during the Leaving Cert, so I'd say, after probably the first two essays, take a rest period because you're allowed fifteen to twenty minutes’ rest, and then I thought thank God for the visiting teacher at that time, she fought really hard with the state examinations commission to get me the ten minutes per hour, … you'd have to fight as hard as you can to get as much extra time as you can … she wrote a strongly worded letter to the SEC, the state examination commission, saying how it’s incredibly tiring to constantly type all the time. On my eyes it’s especially hard, with my eye condition, it’s very hard to keep going, to keep staring into a computer for that length of time.”*

While exam accommodations aim to promote equality and participation within education (Steer, Gale & Gentle, 2007) the procedure to ensure provision experienced by Aoife was an ordeal in itself:

*“You have to really put on a sob story for these people and, you know, totally milk it and practically beg for as much time as you can get. Because I know they're so stingy in giving special recommendations*”.

**Lack of “Back up and support” from school with teaching modified papers**

Standard examination formats and procedures may present particular barriers for blind and visually impaired students therefore accommodations are essential to level the playing field (Steel, Gale & Gentle, 2007). A key role of the visiting teacher service is to ensure exam accommodations are made specifically, that modified papers are produced and students have sufficient time to practice prior to their state exams.

Practising using modified exams papers is essential and should students not have this opportunity they will be at a significant disadvantage during their exams. John’s visiting teacher identified one such worst-case scenario. She specifically highlights “*back up and support”* as crucial to equal access opportunities:

*“Back-up and support within school at senior cycle level, because the presumption is when they get to that level that all the work is done and they are able to do it themselves. To give you an example, we are now in January, the mocks are coming up for the Leaving Cert. I was in two different schools, in two different counties yesterday and in both instances I left in the specialised Department of Education modified papers for visually impaired. They have been there in every subject, handed and printed out and given to every teacher, and I asked both students, have you actually being using your specialised papers because that is what you are going to get in your state examination and they said “no” our teachers say we can’t use them, we have to do them the same as everyone else. So I went to both Principals and I said, we have got a problem here because modified means that there are alternative questions in places of diagrams, and I said, if the student is being forced to do diagrams which they can’t see anyway, you know they are not practising on the papers that they are going to get on the day, so therefore they won’t be familiar with what they are getting in their State examination.”*

In direct contrast to the motivation of exam accommodations to achieve equality of access, John’s visiting teacher reports how *“one teacher was quite insistent, he must have the same ‘mock’ as everybody else, to be on the same level playing field.”*

“Mock” refers to practice examination for the Leaving Certification, generally taken in February of examination year. This incident demonstrates a worrying lack of awareness of the needs of a student with a visual disability.

### **Relying on parental and teacher support**

With the absence of the full implementation of the IEP, sufficient planning and on-gong needs identification coupled with appropriate resource provision is neglected. Consequently blind and visually impaired students access to equal opportunities to fulfil their educational and social potential is threatened. In order to overcome this systemic challenge and make effective transitions, students must find compensatory strategies and become reliant on other sources of support.

In Aoife’s case, she credits the extra support from teachers who:

*“Gave up their free time to come in and, even if they’re not paid…they were filling in the gaps which I feel wasn’t fair on them because the role of the SNA was completely abused, but I say hats off to them for all the help that they’ve given me because they’ve been a true inspiration, they’ve been fantastic…Someone else has picked up on someone else’s lack, there.”*

For John, his resource co-ordinator, identifies this supportive family for,

*“Massively compensating for what, I think, the state should have been providing”.*

In this study, all the participants feel well supported by their parents. All of the professionals emphasised that the parental support was vital and that these families are particularly “*proactive*”. Supporting students who are less proactive and well supported by their families is worrying as they are especially vulnerable in a system that is “*letting them* (the students) *down*” (Jack’s resource co-ordinator).

To address the issue of limited resource support at school, all of the families including the Féach, parents association representative and the educational professionals suggest increasing the number of hours allocated to provide for visual disability. This would directly benefit the students’ transition opportunities and also alleviate the pressures on families, as John’s mother says “often the parent can feel they’re like the co-ordinator of all the support”. This issue is also directly connected to the lack of the full implementation of the EPSEN Act (2004).

## 2. Access to Curriculum

This section presents findings from the data connected to the key area - Access to Curriculum. To include blind/vision impaired pupils within mainstream classrooms adjustments to teaching and learning methodologies are essential (AHEAD, 2008; Sahin, & Yorek, 2009; McCarthy, 2013). It is acknowledged that when class teachers suitably adapt teaching and learning methodologies to the students’ requirements, they are equipped to study independently on parity with classmates (Whitburn 2014). Studies demonstrate that teaching and learning practices can present significant barriers to disabled students’ learning (Rioux & Pinto, 2010; Vickerman & Blundell, 2010). In line with the literature review, for students who participated in this study Physical Education and Maths proved the most difficult subjects to access. This was also confirmed by their educational supports. This section examines:

1. Access to Physical Education.
2. Mathematics Access & Learning.
3. Access to Appropriate Technology for Maths.
4. Allocating Resource Hours for Maths.
5. Project Maths Curriculum.

Based on the participants’ lived experiences some recommendations are provided to improve access to the post-primary curriculum for blind and visually impaired students.

### **Access to Physical Education**

Physical education is a subject that blind and visually impaired young people find difficult to access (Franklin, Keil, Crofts and Cole-Hamilton, 2001). Despite awareness that appropriate training for P.E teachers to educate children and young people with disabilities, several studies identify gaps in initial teacher education and continuous development to train and qualify physical education teachers to teach pupils with disabilities access the P.E. curriculum (Fitzgerald, 2005; Morley, Bailey, Tan & Cooke, 2005). Consequently, blind and visually impaired students can be excluded from this fundamental curriculum subject.

A critical factor in successful inclusion is assessment and recording of the young person’s adaptation and support needs in their individual education plan (IEP). Three of the students in this study highlight physical education (P.E.) as an area where their access is limited. None of the students have had a formal IEP developed for them at post primary school. For Sandra and Aoife, access to P.E. was extremely limited to a point that neither participated in the class. Sandra says she’s *“not a fan of sports and stuff but I suppose it would have been better to do it all along”.* Aoife admits “*never taking part and not really being asked to*”.

Both John and Jack are active in sports outside school in Camp Abilities. Camp Abilities is an Irish Sports Council/IT Tralee/ Hyundai Initiative run by the Adapted Physical Activity Centre. It runs 5-day residential sports and recreation camps for children with vision impairments (aged 10-14 years). They call this age group their “campers”. The aim is to introduce children with vision impairments to sports/physical activities and increase their independence in the community. Jack becomes animated when he talks about the sporting activities he has tried:

*“It’s fantastic...I’ve done skiing, I’ve done water skiing….and I’ve done kayaking, I’ve done rock climbing.”*

John is also excited to share his experiences at Camp Abilities. Participating in sports and physical education not only teaches and gives young people essential physical exercise it also develops young peoples’ independent living skills.

At Camp Abilities older children have the opportunity to support younger children in their sporting activities. They are called Leaders in Training (LIT).

This year John and Jack were invited to become LITs. Jack was delighted to be invited to become an LIT and discusses some of the responsibilities associated with the role:

*“So I thought I wasn’t going back this year and then I got a letter in the post saying there’s a programme called LIT, which is, Leader in Training. So there’s a group of us who were campers before but are now over the age… I think I was one of the youngest, the oldest is 17 and I knew them all, like. Basically what we did was we had independent responsibility so like say if we were going off to…one day… an adventure centre we had to organise transport. So, you know, we had to ring up the bus company, check how much prices were, how many coaches we’d need”*

Both students also participate in Vision Sports Ireland’s (VSI) weekend events. VSI is the national governing body for sport and leisure activities for visually impaired people in Ireland. The difference between John and Jack’s experience to Aoife and Sandra’s, is that they were both connected to Féach, the parent group for visually impaired children and both of their families are active in the group. It was through Féach membership that John and Jack’s families learnt about Camp Abilities and VSI. However, despite John and Jack, enjoying sports outside school, neither accesses the full P.E. curriculum at school. John’s mother is annoyed that John is not given more opportunities to participate in the full curriculum in his P.E. class:

*“He’s gone wall climbing, horse riding, swimming, you know, but oh well, you’re on the exercise bike with your SNA again”.*

In order to ensure blind and visually impaired students are included in the P.E. class, activity adaptations as needed are required (Lieberman, Modell & Jackson, 2006). Well informed modifications depending on the students’ visual impairment can enable inclusion, for example “*changing the ball colour to one that contrasts sharply with the background are sometimes the only adjustments needed to enable the student with partial sight to participate fully in class*”(Lieberman, 2011: 238). While at other times more rigorous support is needed such as *“teaching or consultation with an adapted P.E. specialist to help the student with visual impairments learn in P.E.”* (Lieberman, 2011: 238).

Central to including the blind and visually impaired student in the P.E. class is listening to students’ adaptation suggestions, as they can “*provide input on appropriate inclusion strategies*’ (Lieberman, 2011: 238). In the case where the school’s P.E. teacher is not qualified to teach blind and visually impaired students, it is necessary to seek support from specialists, for example the trainers at Camp Abilities have extensive expertise and experience in physical education for young people with visual impairments. Furthermore they describe one of their core goals as:

*“Educating local sports and physical activity clubs on the inclusion of children with vision impairments in sports and physical activities”* (Camp Abilities, 2015).

While the Camp Abilities statement does not extend its responsibilities specifically to educating children during school times, their expertise would be a valuable resource for adaptation information and teaching to ensure blind and visually impaired students’ inclusion in P.E. Douglas et al (2009), reviewing the international literature on best practice models and outcomes in the education of blind and visually impaired children, concluded that in the Irish setting, more effective links should be established between health and education services for identifying and supporting students with visual impairment.

### **Mathematics Access & Learning**

Given the generally visual, two dimensional and non-linear nature of Mathematics it is widely recognised as posing significant access barriers for blind and visually impaired students (Cahill et al, 1996; Karshmer & Bledsoe, 2002; McCarthy, 2013). Mathematics access and learning is reported as a real challenge for all of the students who participated in this study. All of their educational support professionals also admit it was the most problematic subject for these students and all other young people they support. Three issues were identified by all participants as contributing to their difficulties with the Mathematics curriculum; 1) Access to appropriate technology, 2) sufficient resource hours and 3) the nature of the Project Maths curriculum.

### **Access to Appropriate Technology for Maths**

For blind and visually impaired students who access the curriculum with Braille, it is not always adequate for mathematics notation, especially for graphical-spatial mathematical topics (Cahill et al, 1996). Meanwhile, speech synthesizers, such as JAWS, which work effectively when using word processing packages, are not as reliable for mathematics.

Identifying and gaining access to the most effective technology to access the curriculum and subsequently facilitating sufficient time to skilfully manage it, is challenging, as Jack’s resource teacher explains:

*“Maths and technology, I think that’s where he’s really being let down...he can cope with note-taking or typing a lot of material, but Maths - we tried to use a graphic tablet, linked with the interactive white board, but again it takes practice and time. I think the number of subjects in third year kind of restrict the amount of time that he has available to deal with the curriculum.”*

### **Allocating Resource Hours for Maths**

Given the identified challenges accessing maths, resource hours, if not all of them, are often solely allocated to maths support. In some cases, students in this study felt this support was not sufficient and for others while this extra support helped them to keep up with the class, other critical learning areas suffered e.g. Braille and literacy. For Aoife, *“Maths was a huge challenge because of my visual impairment”.* For this reason, she had one-to-one resource allocated to support her at school, however she felt she would have benefitted from longer sessions, as she explains:

*“I only got an hour of resource for maths and it, even though it wasn’t much of a help…., I should have been entitled to them, to be able to sit down and be talked through things properly because I had a lot of difficulty with lots of things in that area” .*

In her Leaving Certificate year, Aoife was upset by the limited amount of extra support and lack of understanding with maths and ultimately decided she could not keep up with the honours maths curriculum:

*“When I tried to do honours maths, I ended up going back to pass because the teacher was so bad with the resource, she didn’t understand my visual impairment, what I needed…she just wouldn’t go slow enough so that I could understand, she just expected me to get it first time…she didn’t really support me or try and help in any way, really, she just caused more stress on me, especially in my Leaving Cert year, the stress was really, the stress of especially trying to do maths was really hard”.*

In John’s case, his visiting teacher strongly recommended that he receive all the resource hours available for maths. His resource teacher acknowledges this was a necessary action. However, she laments that other core learning areas are impacted, as she explains:

*“Where is the priority of support, here?’ and it was maths. So, we poured all of that into the one-to-one…He’s going to have a one-to-one maths teacher, and that’s all the time gone….I was aghast at that because, I mean, clearly he had far greater needs than his maths needs. Do you know what I mean? And I know from very early on, his parents – rightly – identified spelling as an area…and Braille.”*

### **Project Maths Curriculum**

Project Maths is a revised maths curriculum for both Junior Certificate and Leaving Certificate. It was initiated in 2008 and introduced to all post primary schools in September 2012. Project Maths involves an increase in the amount of statistics and probability studied at both Junior Certificate and Leaving Certificate. There is also more of an emphasis on student understanding of the concepts. Students encounter maths in context and investigate and explore mathematical ideas. There are five strands for Junior Certificate and Leaving Certificate: Statistics and Probability, Algebra, Geometry and Trigonometry, Functions and Numbers (NCCA, 2015). Project Maths has meant that all textbooks have had to be completely revised.  Because the 5 “strands” of Project Maths were rolled out gradually, students in different years had different versions of the same book, or different combinations of books. The new curriculum emphasises extensive written answers and drawing to illustrate comprehension to mathematical questions. This can be particularly challenging for blind and visually impaired students.

Jack’s resource co-ordinator explains that the emphasis on visual demonstrations of knowledge requires modifying and updating technology supports to enable visually impaired students’ access:

*“With the new Project Maths, you have to be able to use all the context and application questions. You have to be drawing everything. You have to make a table or a picture sequence out of the words, and heed math concepts that you have to use and things like that.”*

Consequently, maths is more time consuming for blind and visually impaired students. Jack’s resource teacher highlights her concern:

*“Because project maths has gone so text-based and there are a lot of real-life examples and huge paragraphs of text that his equipment can focus in on line-by-line or sentence-by-sentence that would take him longer. I think that’s the only downside.”*

Sandra also found Project Maths challenging to access during her Leaving Certificate:

*“Maths, it’s kind of hard, like there’s Project Maths and it’s really hard for me because I can’t see… I'm not good at drawing stuff. And it’s really; I'm slower at picking up maths than everyone else, just because it’s slower for me to see everything. So I used most of my resource time for maths”*

Access to mainstream technology solutions would greatly benefit visually impaired students. However, Jack’s resource teacher and maths teachers are frustrated by lack of access to this technology due to the Department of Education’s existing technology quote system, as she explains:

*“What we can’t understand that there is no… we haven’t been able to find a quote… I’ve gotten quotes for 14-inch tablets, but I haven’t been able to get quotes for 19-inch tablets. I know that you need to have, like, for the Department of Education, they’re still using their three-quote system, but there are no 19-inch quotes that you can get for one of these laptops and to say that he needs one.”*

She believes that the fact Jack is in his senior cycle is acting as a barrier to the Department reviewing his needs:

*“I know that they’re going to use the excuse that, “Well, he only has two or three years to go in the system ...”*

This study highlights the need for mainstream technology solutions for blind and visually impaired students to be considered and incorporated into the existing allocation of equipment system adopted by the Department of Education.

Currently, blind and visually impaired students are allocated ten minutes extra for every hour of state examinations to level the playing field with their sighted peers. Given the additional challenge posed by Project Maths further accommodations to ensure blind and visually impaired students have sufficient time to access and complete exam questions is required. As the new Project Maths curriculum emphasises the visual representation to such a huge extent, John’s visiting teacher advises that it needs to be radically revised to ensure equality of access:

*“Changing the entire maths course and making it non-visual. The new Project Maths is getting to be an absolute disaster. The exam papers, I looked at last years and the year before where there used to be one diagram say on paper 1, I think there were 11 diagrams last year, now then it becomes an assessment of a mathematical diagram examination, rather than a mathematical examination because you can see an entire diagram with a circle, with a line going in to the centre, in to your radius with a degrees angle marked in it, and a tangent on the curve with its degrees”.*

To include blind/vision impaired pupils within mainstream classrooms adjustments to teaching and learning methodologies are essential (AHEAD, 2008; Sahin, & Yorek, 2009; McCarthy, 2013). When class teachers suitably adapt teaching and learning methodologies to the students’ requirements, equity of access can be achieved (Whitburn 2014). An example of adapting to teaching material to ensure equity of access was offered by a resource teacher:

*“For the Leaving Certificate this lad’s history teacher thought about how he could support him and he went off over the summer and made an audio recording of his course class work… He said it helped him get organized for the year ahead and now his audio recordings are in demand from all of his students.”*

## 3. Access to Technology at Post Primary

Technology can enable improved access to education for blind and visually impaired students (Palmer, 2005; Evans, & Douglas, 2008). However, assuming that assistive technologies alone are all that are required to level the playing field is misguided (Foley & Ferri, 2012; Evans, & Douglas, 2008). All of the students in this study use both assistive and mainstream technology support to enable their access to the curriculum. This section presents analysis of findings related to:

1. Access to appropriate technology for maths.
2. Impact of unreliable technology.
3. Technology being used as a substitute for SNA support.

### **Access to Appropriate Technology for Maths**

For blind and visually impaired students who access the curriculum with Braille, it is not always adequate for mathematics notation, especially for graphical-spatial mathematical topics (Cahill et al, 1996). Meanwhile, speech synthesizers, such as JAWS, which work effectively when using word processing packages, are not as reliable for mathematics.

Identifying and gaining access to the most effective technology to access the curriculum is challenging. Jack’s resource co-ordinator recounts the maths teacher’s frustration:

*“He’s so distraught to think that, there are no supports. That the boys are being let down with the lack of… he said it’s so out-dated what John’s using. Whereas, in America, they can use a tablet PC for example, that you can actually write straight on it…I won’t use the language that was used when describing this piece of equipment – but it’s not capable of working with the Kurzweil, or the JAWS, or the Zoom Text. It doesn’t have that capability memory-wise or anything like that. It’s a crap computer. Let’s say, what he would really need would be… the largest sized tablet that we’ve seen the screen flips around, turns around, and comes down on to the keyboard. You can write directly on to it, etc. But, for John, he would actually need a 19-inch version, and I don’t think we do them here in Ireland yet. In America, this is just normal.”*

### **Problems with Technology**

The Opti Verso, is a large piece of equipment, which has a camera. Visually impaired students commonly use it to access their school curriculum. Jack and Aoife both received an Opti Verso from their school through applying for equipment from the National Council for Special Education. Jack describes it as “*awkward*” to manage and due to its size his SNA finds it *“cumbersome”* to carry. Jack and Aoife both were assigned a special needs assistant in post primary school. One of their duties is bringing their equipment such as the Opti Verso from class to class for them and helping them set it up. Both students experienced frustration with this equipment as it regularly breaks and needs to be sent to the manufacturer to be repaired, as Jack’s mother reports:

*“He has problems with his technology. They break down. The Opti Verso, it’s got the camera on it for the whiteboard but that keeps breaking. It’s the arm keeps snapping on it, which it shouldn’t, so the school sends it off …you could be talking three weeks wait.”*

Jack’s resource co-ordinator identifies the unreliability of the equipment as a significant access barrier:

*“The Opti Verso – the camera in particular – is probably the most sent-back piece of machinery. It’s the one where the hinges keep breaking, and things like that, the arm. Even the same with the other student that we have here in the school {referring to another visually impaired pupil}…it’s a significant disadvantage to him that that camera is so unreliable.”*

Jack is at a *“disadvantage”*, because without his Opti Verso he cannot see the content delivered by the class teacher and must rely entirely on his SNA to take notes during class. Most significantly, it means he cannot keep up with his homework assignments and worries that it may break during exams.

Until she was in 2nd year, Aoife did not have access to an Opti Verso but was assigned an SNA. When she received her Opti Verso her SNA was reassigned to another student at her school. This meant that she had no assistance setting up the equipment in the classroom and when it regularly broke she was forced to cope alone:

*“I did have a SNA helping me in class for a while, until I got my Opti Verso working and then I was left in class by myself just to use the Opti Verso and a lot of the times I remember the Opti Verso caused huge problems, because the laptop that I was using was a very old laptop…I remember the screen on it was cracked and it caused a lot of problems, like, the camera and everything, trying to see the board and things was a huge challenge”*

For both students, a major challenge was coping with homework without the appropriate technology to support them. For Aoife, this challenge was compounded by the upset and frustration she experienced because of the lack of understanding and support from her teachers when she struggled to present her homework, as she explains:

*“It wasn’t like, obviously I hadn’t two laptops, so I wasn’t able to use Microsoft Word to do homework or anything like that, and well I was reliant on my own handwriting and a lot of teachers were complaining they couldn’t read it as it was all scrawny and all the rest of it and of course that was through no fault of my own, you know, trying to write and it was hard to see at the same time, but unfortunately there wasn’t enough technology available for me to be able to do my homework successfully or being able to type stuff”.*

Throughout her senior cycle education, Aoife’s Opti Verso was breaking down. This meant Aoife experienced extended periods without access to her classroom work, as she explains:

*“When it got on to Leaving Cert, it was still the same craic with the Opti Verso, I mean, it kept, the camera itself even kept breaking down…several times to be fixed, things falling off of it, knobs coming loose, just stupid things like, you know, it was highly frustrating because then I wouldn’t have a camera for several weeks.”*

When technology breaks down, all of the students in this study could rely on their designated SNA except Aoife. During these times, Aoife was understandably upset that she did not have SNA support, as she recounts:

*“I remember the longest, I was up to three weeks at one stage without a camera to see the board and even at that the SNAs wouldn’t sit in the classroom at that time so I was totally reliant on teachers to photocopy stuff for me and things like that… I mean I asked them several times to sit in the classroom and, you know, help me take down what was on the board or for them to take notes for me or something, because I couldn’t see what was on the board without the camera and they just, they'd always make up an excuse”*

This issue highlights the assumption that assistive technology is all that is required to level the playing field. Technology even when it does work, is not a substitute for the support of the SNA whose “duties should be modified to accommodate the particular needs of the student” (Department of Education and Science, 2007: 84).

## 4. Access to Print Material

Prompt access to modified curriculum textbooks and materials is fundamental to enabling equal access and participation of blind/visually impaired students (Harpur and Loudon, 2011). Given the limitations of accessing print materials in audio formats (Vik and Fellenius, 2007), continued Braille learning is widely recognised as essential (AHEAD, 2008). Inordinate delays in receiving print material in accessible format are a cause for concern (Cole-Hamilton & Vale, 2000; Harris & Oppenheim, 2003).

John is the only student who used Braille to access the curriculum. Jack learnt Braille in primary school but no longer uses it to access the curriculum as he uses assistive technology instead. His Opti Verso, as discussed in the previous section is his main aid to access the curriculum.

Sandra was advised to learn Braille in primary school and while she did take some one-to-one classes did not enjoy the feeling of *“being different”* so did not continue classes. Also, she could access the curriculum with the support of her technology (CCTV) and her SNA so now does not use it at all. However, she did experience challenges with her speech programme, Tech Spell. This programme enabled her audio access to her textbooks. Aoife never learnt Braille and relied solely on assistive (Opti Verso and Andromeda) and mainstream technology (laptop) to access her post primary curriculum.

Two factors in relation to access to print material were identified as most significant:

1. Impact of delayed access to print materials.
2. Communication breakdown.

The National Braille Production Centre’s perspective on the challenge of producing accessible materials in time and the importance of early ordering is included in this section. Encouraging early Braille learning and prioritising Braille tuition were also key issues raised and are discussed in this section.

Continued Braille learning is advocated as essential for education opportunities (AHEAD, 2008). All of the educational professionals recognise the importance of continued Braille learning. Despite the advice from educational support professionals, including visiting teacher Service, Jack and Sandra discontinued learning Braille during primary school, as they could access the curriculum through alternative formats. Jack’s resource co-ordinator also connects Jack’s apathy towards Braille with the pressure to focus on the Junior Certificate:

*“All he is hearing at school is all about third-year exams. That’s the big focus. He’s switched off.”*

Despite Jack achieving a high competency level in Braille in his first two years in his Junior Cycle, his resource teacher identifies the extensive time commitment required for the large number of Junior Certificate subjects as a barrier to Jack prioritising his Braille tuition:

*“I think the number of subjects that third-year, kind of restrict the amount of time that he has available to deal with the curriculum. …He was really good in first and second year, he flew through – we did all the Braille exercises, we had all the Braille readers...Even if I mention Braille, it’s not… it’s not something he’s comfortable with...I’d say now, when we go back in either TY or fifth-year, that we will literally be starting with the alphabet and that again. We will be literally going back to the basics”*

In John’s case, due to the deterioration of his sight, he switched from accessing the curriculum through large print to Braille. Given the lack of extra resource hours for Braille, John’s resource co-ordinator recognises that his level could be much improved:

*“He is not where he ought to be with Braille, and that’s down to lack of resource”.*

### **Delays Receiving Print Material Greatly Impacts Access**

Prompt access to his Braille books emerged as a significant access challenge in this study. For John, while, generally his Braille textbooks arrived in time for the start of the academic year, the impact of delays undoubtedly disadvantage his access to the curriculum. As a result, he has struggled with some subjects. John identifies late curriculum changes as the cause of the issue:

*“There were problems, however, with some of the Braille books, especially in French, for a couple of months I was left with no book pretty much in the classroom…. mainly just because the books that would have been used for class were changed at the last minute, really, and that was a bit of a problem…. I mean, I've noticed myself I've even, in terms of grades and that, I mean it was a lot harder to study, I was almost looking for something to do in class because I couldn’t really follow well.”*

While he had no access to his Braille French textbook, John and his SNA decided to Braille out the work themselves, as he explains this was challenging:

*“We brailed out sections of the French book through the Braille embosser, yeah, that was done by my SNA so I was able to keep up, but it was slower and it was a little bit more awkward as well. I mean it’s pages stapled together and then split into different sections and coming at different times rather than all at once, so you know, it did make a bit of an issue”.*

To ensure that books are delivered on time orders need to be submitted through the visiting teacher service with a lead in of up to eleven months. In this case as John’s mother explains how that was completed:

*“The Braille books we’d to order about eleven, twelve months in advance, so we’d met with the relevant people in the school, book lists were sorted, ordered, that was all fine, books started coming in, kind of say early January and by the time Michael was ready to go back to school on 1st September, all his full complementary of French book had been received but then there was a change, and so the NBPC had delivered in time his French book but the title had been changed by his teacher, OK, so there was no notice given and because it was a new edition.”*

John’s father identifies the inability to fully rely on the school’s confirmed booklists, as the fundamental flaw in the book ordering process:

*“It’s telling us what books are going to be required, on time, to give the NBPC time to provide them with the eleven-month lead in. If all that had been done, I think it would have reduced the problems that we had by a huge percentage.”*

While John waits for full access to his French curriculum, he is at a loss in the class, as he remarks:

***“****It’s quite frustrating and also quite disappointing to be honest, because as any student I trust my teachers, you know, and even in, take, say, today, in French class, I was sitting there putting my hands out, what can I do, you know…I mean, because even if the book wasn’t there, I don't think it’s really too much to expect for the teachers to give you alternative work.”*

### **Communication Breakdown**

John’s parents identify *“communication breakdown”* as the cause of the issue both within the school and sometimes at Department level, as his mother shares an example of ordering his English textbooks:

*“Initially you were meant to be doing Macbeth, all books delivered from National Braille Production Centre no problem, all there, copies at home, copies in school, brilliant. School starts; it’s Othello. Now seemingly that’s not the school’s decision to decide on what book…it’s the Department. So, again, communications or somebody’s not making a phone call in the system.”*

During her senior cycle, Sandra also experienced prolonged delays in access to print material, as she remembers:

*“I didn’t have my books, that took ages…I have to get my books on Tech Spell .., because I have a speech programme on the computer to read them out … I’d tell the visiting teacher what books I needed…I’m not too sure, just I know like everything takes ages, like I’d try and get the booklist as soon as I could and know what topics I was going to be working on so I could plan ahead, like that was a big thing, knowing what books I have then the wait trying to get the booklists off the school, stuff like that. Well I was able to use the print books usually with the CCTV so I wasn’t totally without the book, but sometimes it was a bit harder.”*

Blind and visually impaired students like John and Sandra, depend upon their school to inform them of their booklist with sufficient notice to order their materials through the National Braille Production Centre. Furthermore, it is essential that once their books are ordered that the school does not change the curriculum or should it be absolutely necessary to change the books that the newly selected books are available to arrive in good time for the start of the academic year.

To resolve this issue, a minimum recommendation is that students and their parents receive a guarantee from the school personnel, that the booklists once confirmed cannot be changed “at the last minute”. Furthermore, should a curriculum change be absolutely unavoidable, that there is also a guarantee that the alternative book is available in accessible format for blind/visually impaired student in advance of the start of the curriculum. In cases, where a student, like John, is without access to core curriculum texts, additional support and resources should be provided to ensure lack of access does not impact his progress and ultimately his exam performance.

### **The National Braille Production Centre’s (NBPC) Perspective**

In order to understand the process of ordering, producing and delivering Braille and alternative format texts to students in Ireland, this study includes the experiences and perspectives of an experienced representative from the National Braille Production Centre (NBPC).

The NBPC is a national service, which provides access to educational materials by transcriptions through a range of formats accessible for children with a visual impairment. The formats currently catered for are: Braille, tactile diagrams, large print and text-only files on computer disk. All transcriptions follow recognised European and international guidelines. The NBPC started in 2000 with 2 full-time, 2 part-time staff and 35 clients. Currently, there are 9 full-time and 5 part-time staff, 6 Braille proof-readers and a total of 210 clients in both special and mainstream schools. The staff are chosen for their expertise in various areas, such as mathematics and foreign languages and are all trained to Standard English Braille Transcriber level. Early engagement with Braille is also strongly advocated by the NBPC.

Two interlinked challenges were highlighted during discussions with the NBPC representative:

* The challenge of producing books in time.
* The importance of early ordering.

To overcome these challenges the NBPC representative, recommends developing an *“agreed curriculum for students with visual impairment.”* John’s Visiting Teacher and the parent group Féach’s representative in the subsequent section on access also make this recommendation to supports and resources.

### **Challenge of Producing Books in Time/Early Ordering**

The NBPC representative gives the example of the length of time it takes to produce a post primary Maths textbook to demonstrate the NBPC’s challenge:

*“If you have a secondary school Maths book, it can take anything from five months to a year or even longer because there is no automised software that can just read in the print and spit it out in Braille, for lack of a better word.”*

To ensure timely production and delivery of books, the NBPC stress early ordering is extremely important:

*“We are asking students, if possible, to give us their orders by mid-November to mid-January. If they manage to do that, if the schools manage to do that we guarantee a minimum transcription output, and we fulfilled our guarantees between 98 and 100% over the last few years. “*

The NBPC representative recognises that this is also challenging for the schools to confirm in advance and this is where delays can occur:

*“Unfortunately for many schools that’s very difficult to achieve and it’s very difficult for the visiting teachers to get the orders from the schools because they are under pressure in terms of how many students will we have, what teacher allocation is there, are there curriculum changes, are there book changes, so the reality is that half of our orders won't come in till about May, June this year, even July, which puts us under pressure”.*

To overcome the challenge late curriculum and books changes place on the production of accessible educational materials, the NBPC recommend introducing an *“agreed curriculum for students with visual impairments”*. Agreeing on core texts she believes is the solution, as she explains:

*“If you had core texts at every school level from Junior Infants through to Leaving Certificate that would make our lives a lot easier. You might have the situation, for example, that you have five or six children with visual impairment in five or six different schools around the country, let’s say fifth class primary school and they all do Maths, but they order five different Maths books because we have this huge educational publishing market for quite a small country and the schools have full power and full authority over which books to choose for teaching and in many schools it’s even the teacher who can go in and say, ‘I'm teaching this book.’…In other countries there is a core curriculum that once you have a child with visual impairment in your classroom, this is the book that everybody would be following, so that would make like a lot easier”.*

The NBPC representative identifies the root of the issue with *“the relationship between the Department of Education and the publishers, they struck a deal a few years back that books shouldn’t change more than every four years; however, there are lots of ways around it by the publishers and we’re also talking e-books…we have a new Junior Cert coming in and the schools aren’t sure how parts of it will work. It could be that different schools use different parts of literature or create their own readers which will be very difficult for us to, you know, even get the core files and start from there”*.

To address this issue, she also recommends *“a bit more advanced planning from the schools, and a bit more communication to us would help as well”.*

### **Encouraging children to learn Braille early**

The NBPC recognise *“the skill of reading Braille is best developed from an early age onwards, starting with tracing exercises and the development of pre-Braille skills. But throughout the whole educational system, it is important to be aware of the extra effort needed in accessing core information” (NBPC, 2000)* Continued Braille learning is advocated as essential for education opportunities (AHEAD, 2008). The NBPC representative reports that *“studies have shown that students learn better, have better language acquisition and better general grammar skills, literacy skills if they have Braille skills. It’s a very, very basic skill for their further educational success. What we are trying to do is to encourage children to learn Braille”*. Furthermore, she states that the NBPC advise students to try out different mediums for example, *“to read their Braille books but to also use Braille on different technology products, for example Braille displays which are like little keyboards you can attach to your PC”*.

### **Prioritise Braille Tuition in Resource Allocation**

Despite the encouragement from educational support professionals, including the visiting teacher service, Sandra and Jack discontinued learning Braille, as they could access the curriculum through alternative formats. Jack’s resource co-ordinator also connects Jack’s apathy towards Braille with the pressure to focus on the Junior Certificate. Even though, Jack achieved a high competency level in Braille in his first two years in his Junior Cycle, his resource teacher identifies the extensive time commitment required for the large number of Junior Certificate subjects as a barrier to Jack prioritising his Braille tuition. Jack’s resource co-ordinator tries to convince Jack of the importance of learning Braille, however he does not want to pursue it:

*“Even if I mention Braille, it’s not… it’s not something he’s comfortable with… I am always saying to him, “What happens in the morning – say for example I lost my eyesight...For him it’s a skill. Like that, if you don’t use it… it’s such an important one.”*

Jack considers Braille *“just a backup, in case God forbid anything did happen with my sight”.* Whereas, his resource co-ordinator is trying to instil in him the idea that *“no education is valueless… and for him it’s a skill. Like that, if you don’t use it… and it’s such an important one for him to have.”*

All of the educational professionals interviewed recommend that Braille tuition be given sufficient resource allocation in school timetabling. For example, the student could receive one-to-one tuition every morning as John’s resource co-ordinator suggests:

*“I would have liked to have seen the situation where John was in a school where, for example, he could have come to school at nine o’clock in the morning, and between nine and 11, what I considered to be his priority need, learning Braille. In other words, that he could have sat and practised and learned his Braille, and had a very experienced Braille teacher teach him for say an hour or two hours, every morning. Then, at 11, go off and do the rest of his day.”*

However, she is acutely aware that this did not happen due to the priority given to core curriculum subjects, restricted resources and budget:

*“But you couldn’t do that, because then he’d be missing his English class, or his Maths class, or his French class, or his Geography class, or whatever. But why is that? That’s got to do with money. Quite apart from the fact that there isn’t the money to employ the Braille specialist long enough to come to him individually, and give him that.”*

Consequently, the impact of not prioritizing Braille is that John has not been enabled to use his own language, his resource co-ordinator asserts:

*“Now, if John had been given that kind of support when he was 12, 13 and 14, and if he had become very proficient – in other words, fluent – in Braille, that would have been significant…one big thing”.*

## 5. Access to Transition Opportunities

While the post primary school setting and specifically the role of the career guidance counsellor is to facilitate the effective transition for young people (National Council for Curriculum and Assessment, 2009; McGuckin et al. 2013), due to limited resources, students with disabilities may not experience the benefits of such support, as resources are limited. For blind and visually impaired students who are engaged with the visiting teacher service, a transition report, which includes an assessment of individual needs and requirements (e.g. Braille and technology needs and abilities) is completed by their visiting teacher and sent in with their CAO form.

This section presents significant needs identified by students, their families and the professionals who support them. Subsequently, some solutions recommended by participants to support these needs and improve transition opportunities are provided.

These include the need for:

1. Specialised supports for blind/visually impaired students during Transition Year (TY).
2. One-to-one career guidance sessions.
3. Transition report tracking system.
4. Establish link up system between post primary and third level.
5. Establish a liaison officer role between post primary and third level.
6. Peer support networks.

### **Transition Year time to Develop Specialised Support for Blind/VI students**

John’s visiting teacher identifies the transition year (TY) as an ideal time to focus on blind and visually impaired students extra educational needs, for example Braille, technology practice, mobility and independent living skills. However, given the full range of extracurricular activities and outings organised during TY and that there is no policy currently in place to facilitate the allocation of extra time to skills related to students’ disability, this opportunity can be *“hit or miss”*. John’s visiting teacher gives the example of one of her current TY students to demonstrate this:

*“I had a lad doing Transition Year this year and I just cannot get access to him because every time I look up, he’s out somewhere, they are on a sort of course, they are out doing a visit, you know and I need to get his brain organised and I need to get his technology organised and it can be hit and miss. So it can be a very productive year or it can be a disastrous year.”*

John on the other hand, did not take up TY. Earlier in his education, due to medical reasons, he had already repeated a year. Because of this, his parents believed it was best for him to continue with his friends into 5th year, as he’d be “getting too old”. However, even if he had taken TY his parents are sceptical about whether his access challenge needs would be allocated the time required given limited school resources:

*“Once his visiting teacher was saying that transition year would be great for him because he could do this and we could do more like the Braille stuff and get extra with the weak subjects, and then like then we were having our meeting with the school about other issues, we realised that the resources aren’t there, the money’s not there and there's no way we could tailor make a package for John for transition year”.*

John’s parents believe given adequate resources transition year could be used as an opportunity to equip blind and visually impaired students with independent living skills, as they both consider:

*“For somebody with disability or whatever transition year could be great, you could do your mobility skills down in Cork, you could do your one to one in your Maths or your accountancy, you know, because that’s the subjects [Mother]…It’s an opportunity [Father] It’s an absolute opportunity [Mother] Independent living skills and other areas [Father].”*

While John’s visiting teacher in general believes that specialised support for blind and visually impaired students in TY *“policy wise I think it would be a good idea”*, as for example, she *“had massive supports in schools where I saw student X requires this, the whole area of technology to be done in the Transition Year and they get on and they do it”*. However, she cautions that a structured programme would be developed to ensure that blind and visually impaired students were included in whole class activities such as extracurricular trips and were not “left staying behind in school to do specialist stuff”. Nevertheless, she recognises the benefits of a carefully developed *“specialist element for Transition Year”*.

### **One-to-one career guidance sessions**

One-to-one career guidance sessions are advocated as most helpful for students, especially students with disabilities (Banks & Smyth, 2011; McGuckin et al., McCoy et al., 2014).

John, Aoife and Sandra felt they did not receive sufficient support from their school career guidance counsellor. Jack at the time of interview was in third year and had not met the career guidance counsellor. However, he did comment that he planned to meet with the counsellor personally. John’s father explains that the limited amount of career guidance support John was offered at school differed very little from the support his sighted son received:

*“I would say the fact that John has little or no career guidance, was probably not all that different to his older brother…I don’t think it’s a factor because he was blind.”*

In Sandra’s experience, her career guidance counsellors lacked disability awareness:

*“I don’t think the career guidance people know too much about the disability and they wouldn’t really know themselves, they wouldn’t have the information”.*

Career guidance counsellors regularly seek Sandra’s visiting teacher’s advice to help them support blind and visually impaired students’ career choices. As career choice advice is not her area of expertise, she is not comfortable giving formal recommendations. Given the added complexities for students with disabilities, in making transition choices she believes there is a need to deliver more specialised and structured guidance support for students with disabilities:

*“I think the whole choosing the course as well, is an area that needs more addressing because often career guidance teachers might refer to us and then I’m not really, you know, it’s just a whole other area that, you know, that you feel you can’t take on and off and then kids are in fifth or sixth year and their immediate concern is their study and exams. I suppose it’s maybe similar for other kids but for the students we work with, it’s much more important to research the elements of the course and, you know, are they going to be able to complete them all. They need to do more work on it and at the moment it’s ad hoc”.*

With the exception of Jack, the participants in this study do not have access to one-to-one sessions, as guidance is mainly delivered with the entire class group, Aoife’s experience echoes a common experience among the students in this study:

*“The role of career guidance teacher, they should get more involved there, it’s like we had career guidance classes in school, but we were just kind of left to do our own thing…she didn’t really get that much involved… she just gave the basic information about the CAO and that was about it… the careers guidance should maybe, I don't know, like, get more involved in promoting colleges or, you know, not just completely leaving students to do their own research…show students, like, what's on offer and help. I would say hold individual appointments with students as well, especially for students with disabilities… help them with their transition rather than having them do it all by themselves”.*

The Principal of a school with a long tradition of teaching blind and visually impaired recognises “the one-to-one approach” being “very, very important” in guidance, especially for students with disabilities. In particular, she emphasises the need for “one-to-one knowledge of their academic level, talents, needs, especially for students with extra needs”. Following the one-to-one with career guidance, the next step is to involve the team focused approach ‘to prepare students for their transition”.

All of the students in this study believe they would benefit from one-to-one career guidance with a teacher who has an awareness of the needs related to their disability.

### **Track Transition reports for Blind and Visually Impaired Students**

The visiting teacher service produces a transition report, which includes an assessment of individual student needs and requirements (e.g. Braille and technology needs and abilities) for all of their designated 6th year pupils. This report is submitted with their CAO form. The purpose of the transition report is to equip the CAO and third level disability officers with critical needs assessment information to facilitate effective access. John’s visiting teacher outlines the purpose and content of the transition report and the submission process and expresses dismay when she discovered recently at a national meeting with third level disability services that the transition reports can be misplaced:

*“We actually write what we call our transition report. So when our students are in 6th year and are filling in their CAO, we send a document with the student stating that it is student X and they have used this equipment, that equipment, they have done their typing, they have done their word processing, they are familiar with laptops, they are familiar with CCTVs, they are used to Braille, whatever Daisy books, whatever they have been using we write a report stating what has been done and what has been used throughout their school life. Also stating what level of SNA support they have got, what resource hours support they have got, it is a huge document. It is usually four or five pages.”*

Naturally, having dedicated significant time towards carefully identifying their students’ needs, when John’s visiting teacher discovered recently at a national disability service meeting that these transition reports are not consistently distributed, herself and her visiting teacher colleagues, were stunned:

*“Now I was very, very disappointed because we just recently had a meeting with DARE and the person said, “we never see those reports”, I said in the back of mind, what the hell am I wasting hours…For some reason or other you see I don’t have the absolute facts but the person just said quite clearly that they often do not get those transition reports and we were all quite taken aback…We couldn’t believe it…we were gobsmacked…they often, I can’t say in all cases because they do get them in some cases, but in quite a lot of cases they get no transition report.”*

Given this ad hoc transferral of transition reports, it is recommended that a tracking system be in place to ensure that student reports are received by third level disability services.

### **“Link-up policy” Between Post Primary and Third Level**

Establishing links with third level education institutions has been recognised to contribute to a smoother transition, especially for students with disabilities (National Council for Special Education, 2014). However, in John’s visiting teacher’s fifteen years’ experience supporting blind and visually impaired children in Dublin region:

*“There isn’t any school that I am aware of that would have a communication or a link-up policy with third-levels”.*

While a direct policy to link up with third level education institutions for most schools is not a reality, informal links in communities are being established. Aoife and Sandra did not have support from their educational support professionals in making transition choices instead they relied on their own proactive approach. John, with the support of his proactive parents, is investigating his transition options with support from his visiting teacher, while Jack is in the process of making transition choices and has strong family support guiding him.

All of the students, their family and professionals believe that they and other blind and visually impaired students would benefit from establishing more formal engagement between post primary and further and higher education sectors. Sandra’s visiting teacher acknowledges the need for liaising between post primary and third level, though given the increase in visiting teacher caseloads she feels unable to prioritise this extra activity:

*“My predecessor used to do it but because our guidelines, our cases got so big and our numbers didn’t increase, our numbers of colleagues - that there was a lot of work done around, you know, criteria for being on the caseload and sort of, you know, what age bracket we serve and so the cut-off point - there had to be a cut-off point - because the priority, the focus had to be on the young children coming in so the cut-off point was the transition report, the transition to third level… I do think in the case of kids who are using Braille or with a very severe disability that that would be warranted, but I think from the overall management of our service point of view there is a feeling that, you know, you have to cut off somewhere”.*

Despite the requirement to prioritize very young children, depending on individual needs (e.g. mobility), parental support and the students’ own personal motivation, John’s visiting teacher will support her senior cycle students to engage with third level colleges. In her experience, the third level institutions’ willingness to engage with senior cycle students and support their access needs varies greatly, as she considers:

*“There is no evenness of support, there is no evenness of delivery of service, because some colleges will produce Braille, others absolutely refuse to produce Braille”.*

For example, this visiting teacher identified one of her students’ Braille needs, however, following her student’s acceptance on a college course, these needs were not met:

*“One student went to a college in the city centre and I wrote a report saying the student needs all this kind of Braille equipment… they refuse to do, to produce any Braille for students. They will not give anything in Braille format. So it took nearly a year to get a Braille line so that the student could actually read the text volumes that they had given to her in Braille. They didn’t set up the Braille line. I got an emergency phone call one night, it was half way through the academic year and would I please come and see if I could set it up, which I did and we got it up and running.”*

For her transition to third level, Sandra was determined *“to do everything on my own. I was like, I'm independent and I don’t want my mum ringing up for me”.*

When she did contact the college disability service where she had applied, however, she felt as she was not registered yet, her enquiry was unwanted, as she explains:

*“It’s really hard because they don’t like giving you much help before you register, I rang them up in the summer…the disability support service, and they were like, oh you can’t do anything until you start in September and we won’t talk to you basically. And I was like, sure it’s too late then because my lectures will be starting and I'll have nothing in place, but that’s just their attitude.”*

To reduce the potential for incidents such as these to reoccur, John’s visiting teacher believes an open attitude from disability services and early engagement would benefit students. For her, the significant factor is, for disability services even if they are not fully aware of the students’ specific technology needs that they demonstrate a proactive-ness in engaging with the student to find out:

*“I have been bringing Transition Year students to colleges, you know, so that they can plan for their future and we have met Officers and they have been very, very sort of open and you can try this and they are proactive and when I mentioned student X who is using this piece of equipment, he said “Oh, I have never heard of that”, wrote it down, looked it up and got back to me on it.”*

While the Visiting Teacher Service has an active role in the transition from primary to post primary, their duties and responsibilities do not officially extend to liaising with third level. For this reason, support from visiting teachers in the transition process, following completion of the transition report is not legislated but provided for on a personal basis.

### **Need for Liaison Officer between Post Primary and Third Level**

Sandra thinks students would benefit from the support of a designated person liaising between them and the third level institutions’ disability services:

*“Someone like a visiting teacher and then maybe if there was someone from the college to liaise with students, just to liaise, something like that”.*

John’s visiting teacher echoes Sandra’s suggestion and expands on this by recommending the potential for the Higher Education Authority to designate regional Disability Officers to support blind and visually impaired students’ post primary transitions, as she states:

*“Solas as it now is, still have Disability Officers, and the equivalent in the Higher Education Authority, there should be regional Disability Officers. Just say we’re in Dublin, so say Trinity, UCD, DCU whatever, you see that’s where if you have that designated person, you know like sort of, four regions, western, southern, Dublin, because Dublin is so big you know, eastern or something like that. So that you would have an officer who had say 45 to 50 visually impaired, because that would be about what is going around all the colleges, and if he or she knew what courses they were on, what supports they had and what they did afterwards, where it would mean that there would be a record.”*

She recommends that the liaison officer initiate relationships with post primary students while they are in transition year to give extra support in key independent living skills *“to be linking in with students in transition year to do the technology and other core skills”*. While a direct policy to link up with third level education institutions for most schools is not a reality, informal links in communities are being established through a range of national services providers for blind and visually impaired. These include the Irish Guide Dogs for the Blind Next Steps training programme, NCBI-Working for People with Sight loss and individual visiting teachers and individual disability services. In this study the Irish Guide Dogs for the Blind Next Steps training programme was identified by Aoife as equipping her with technology information and independent living skills to make the transition to third level, as she says:

“*It’s brilliant…, it’s a pre-college course basically that they’ve started running recently and they basically, cover a range of different necessities for disabled people, for disabled students to learn for going to college. There was a talk there with a…graduate… who talked all about iPhones, iPads, Bluetooth keyboards, basic, different things necessary for college, technology, computers, Zoom text, JAWS, all the basic things and how to use them and how well they work, different apps that you can get on your iPad such as iBooks for college which is just amazing like,... they do ILS as well, they do a range of independent living skills, so like cooking different, like quick dinners that you'd possibly make in college.*”

Aoife however, is quick to acknowledge her own proactive nature as a key factor in finding out about this initiative and other access to college initiatives and worries that as this information was not made available at school not all students with disabilities are aware of opportunities:

*“I went looking for them…it is worrying, it is a worry because a lot of students with disabilities are very vulnerable and I know I'm a very determined person but not all disabled students are like that, they need the help from their supporters.”*

The benefits of early engagement between the post primary and third level for students with disabilities has been identified in recent studies into transition experiences of students with disabilities in Ireland (McGuckin et al. 2013; McCoy et al., 2014). While the availability of a dedicated disability officer and the development of access plans for local implementation can contribute to the widening participation of students with disabilities (HEA, 2008, 2010) this study’s participants experience engaging with third level was “uneven”. Nevertheless, all participants unanimously advocate the benefits of early engagement. In Aoife’s experience early engagement with college disability services played a vital role in her transition choices, compensating for poor guidance support at school:

*“I’ve been coming up, I've been paying visits, like, I first heard about Caroline (Disability officer) and I went up there to the college in fifth year. I went, I took it upon myself to find the disability support service stand here on one of the open days that were held here for fifth years. I first met Caroline and then I got her contact details and a lot of the transition happened through her really because the career guidance in my school was poor, so any advice I went straight to here, I spoke with career guidance teachers here as well…yeah it really influenced my choice on the CAO then, it was a huge help, I’d definitely say to other students to engage with college disability services as soon as you can”.*

From Caroline’s perspective she recognises that Aoife is a particularly *“proactive determined young woman”.*  Caroline identifies the need for outreach activities with post primary to improve awareness for students with disabilities about available technology supports at college. She explains how their service developed from an informal support to a more structured programme:

*“We’ve been doing it for a long time, really. I suppose for a while there was no kind of structure around it, it was kind of ad hoc in that if somebody had a query about technology I’d go out and talk to them. …Six years ago maybe, we decided to formalise it and there was an initiative out then called Pathways to Education… there was home-school liaison…we had an assistive technology post… to link with schools and provide training for teachers, parents and students around technology. So we were trying to raise awareness of technology in second level so that then hopefully when the student came into third level, they were using it ideally, but if not using it, then at least they had an awareness of it.”*

In her experience, giving students with disabilities advanced training and practice with technologies can reduce access challenges:

*“It can make a big difference because, you know, realistically for any students coming into third level for their course, they don’t need the added complication of trying to learn the technology on top of that, so, you know, for any student with any type of disability, if they're good technology users before they come in then that really does make a difference to their smooth transition into third level…the problem for a student with a disability is, if they're struggling with technology and then they have the assistive technology that they need to access the technology, they could be struggling on both sides, whereas if they are good technology users coming in, then it does make a huge difference to them.”*

An issue raised in the earlier section of this report on the challenge of unreliable technology is familiar to Caroline and she believes this is an area where the benefits of early engagement can provide strong back up support for students:

*“One of the big things, I suppose that the schools have been positive about is sometimes if the school has equipment and it breaks down they have nowhere to go to get it fixed, so they could have a laptop or a piece of technology, you know, that’s been sourced and then something happens it and nobody knows how to fix it, whereas with these students when that happens, they pick up the phone and we sort it out. So at least then the equipment continues to work.”*

The SWRAA is a project funded by the Higher Education Authority “to stimulate collaborative, inter-institutional working, and to foster the transition towards a regional cluster for the promotion of equity of access to higher education” (SWRRA, 2012).  It includes the partners of the Shannon Consortium (UL, LIT, MIC, ITT) and the Pathways to Education Initiative (UCC, CIT), NUI Galway and Athlone Institute of Technology. A SWRAA disability officer identifies the outreach activities with post primary schools supported by this fund as a factor in improving access opportunities of blind/visually impaired students from neighbouring schools to her college campus. The National Exchange of Assistive Technology (NEAT) activity is spotlighted for its direct impact in mainstreaming expertise and also facilitating experts’ link in with students to ‘replace old equipment with more suitable technology’. Caroline, the disability officer who participated in this study, describes the initiative and the impact for one of the post primary students she supported who had been struggling:

*“It’s called the Southwest Regional Alliance on Access… we identify students with a range of disabilities including visual impairment in the region. So we got funding through the HEA for that, and OK so based on that we have our ten students, but as well as that we have been able to go out and link with other students…with the ten students we looked at the technology, if it was appropriate we left it. In most cases it wasn’t, simply because the technology has moved on, you know, you had students in second level with the schoolbag full of large print books, maybe an Opti Verso, in another bag, and the laptop in another bag. I went to one school and they had actually given the child a trolley to go round the school with three bags because there was no way he could* carry the bags…*that’s like he’s sticking out like a sore thumb. So we went in and we replaced that”*

Replacing the trolley remarkably improves this student’s access and inclusion in school. While at the same time, Caroline and his teachers also notice the dramatic knock on effect in his real engagement with the new technology. Caroline identifies current technology funding policy as a barrier for students receiving the most up to date and appropriate technologies. Equipping students with mainstream technologies empowers students with disabilities to fit into mainstream environment:

*“It can have a huge impact because, you know, if it’s really making them stick out, it can make them resent the technology, you know, and I get that all the time from parents and teachers saying, yeah, we know he needs to use it but he won't. So, I suppose, you know, things have changed a little bit. The problem with the students is that they may have been recommended technology, say, in first year, the technology may have moved on in second year but, because of the funding restrictions, the department is not going to replace that. We’re using a lot of iPads now with children in primary and secondary school because it has the cool factor.”*

Returning to the student who had previously carried his curriculum work in a trolley, Caroline explains the impact for him was to now fully participate in class:

*So, going back to that student with the trolley, we replaced his technology, we gave him an iPad, put all of his books on the iPad, so that got rid of the schoolbag with the books and then we gave him an Eclipse Scholar, .. a small magnification device, about the same size as the iPad but a little bit fatter, so he’s down to one bag now carrying the iPad and the Liberty Scholar and he can get around and it’s a lot more manageable for him, whereas in some classes he wasn’t even switching on the laptop or the iPad because by the time he’d get from one class to the other class, the class would be half over and he’d say that by the time he’d take everything out of his bag, put it up on the desk and get everything set up*

Given the resources, this project could support a maximum of 10 students in each region of the SWRAA for two years. This scheme along with other well recognised initiatives such as Dublin City University in the Community and Trinity Access Programme outreach activities demonstrate the important role of developing and moreover sustaining links between post primary and third level institutions to widen access and participation of students with disabilities in third level education in Ireland.

### **Peer Support to Facilitate Transition**

Peer relationships are a well-recognised source of support during challenging transition times (Murphy, 2011). The most challenging transitions often occur in adolescence and young adulthood, as individuals in their move from school to further/higher education and employment are faced with a “tyranny of choices”. Having access to “similar others” (Thoits, 1986) to confide in and relate shared experiences of visual disability can benefit their transition choices and subsequently contribute to smoother transition.

Aoife identifies the support she received from another visually impaired student as critical to her transition and building her confidence:

*“The one person that saved me when I was in school and having such a hard time and I remember I went to one of the guide dog open days where I met my best friend now, Jane, she’s vision impaired and she’s one of the people that saved me really. She kind of helped me with the transition as well, telling me about the local college because she’s a past pupil from here and telling me some of the things that were available and telling me about the DSS and all those things and she’s really, she’s like me, she's a determined person, she’ll strive for anything until she gets it, you know, and she really built me up.”*

The Féach representative, highlights the support and confidence her children gained from attending organised activities for blind and visually impaired children, such as Camp Abilities and Irish Blind Sports:

“*I started off doing a lot of social things, there was the skiing, bowling, trying to get parents and kids to come together and get peer support, but because of the likes of Irish Blind Sports, there's another group who do water skiing, Camp Abilities…Peer support it’s huge and people don’t understand it at all - they would see their kids enjoy it. Like when they say…we were all talking about our books in school or this, that and the other. In school they are different so, if it is for one week they were… out, it doesn’t happen a lot so it was great, it really boosted their confidence …Camp Abilities is the same. I remember last year the teacher at the end of the year said to me, you know ‘We have done a lot of resources with …and the difference between the start of the year and the end of the year has been phenomenal’ and we said we’d like to say...really the biggest difference came after Easter...when he came back from Camp Abilities…to see them all wandering around together, you know, it’s fantastic”*

John’s visiting teacher recognises the potential for peer support relationships for support with accessing both primary and post primary curriculum. Currently, she is setting up a network of blind and visually impaired primary pupils who she supports in her region. She is also involving their school support teachers, so in essence she is establishing a peer support network for both students and their teachers:

“*I am very, very lucky that I have a group of students who are sort of geographically quite near to each other. Now they are all on Braille, the six of them, so we would meet regularly. Plus the Resource Teachers, the SNAs, the parents, and myself and the children would meet… You see as part of our duties, you know like linking in, supporting and empowering is our role, so to empower one Resource Teacher to meet another Resource Teacher to share your experience in year three, my child is in year two, so what did you do last year… they all work tighter…. They love the fact that when the six of them are together there are six white canes tapping along the ground, because these kids are in separate schools and they are the only one…*”

John’s visiting teacher also advocates setting up peer support networks especially for Transition Year students. This is discussed in the earlier section of the report, recommending specialised supports during TY, to be supported by a regional disability liaison officer. Sandra’s visiting teacher also identified the benefits of linking students in post primary, especially around transition choices, where possible, she and her colleagues would try to link a student with someone who had experience with a particular college course:

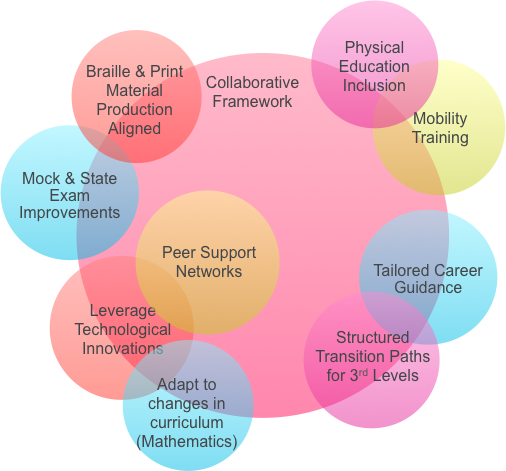
*“What we do in our group is that sometimes we would email, you know, send an email around to all our colleagues saying, you know ‘Does anybody know somebody who is having difficulty’ and, you know, it mightn’t even be about college but current stuff like technology or, you know, who is having an issue with socialising and finding it hard to make friends and you know, is in mainstream. We would often link people like that and I know when my last group of students who had very severe visual impairment were making the transition I tried to link, you know, either somebody in a career, a visually impaired adult in that career to link with the student or around tech. Yes I do it, I do it on a one by one basis, it’s not a kind of, it’s not a system that’s in place but I know other colleagues also, you know, you would often see an email going around, not specifically in relation to careers or third level but I think it’s a very good idea and I think it’s probably the best help.”*

Peer support can be available at a variety of levels. All participants appreciated the benefit of accessing support from peers both in person and when that is not feasible given the different locations around the country of both students and their supports, this can be achieved through on-line communities (Magennis, Murphy, Lazaro, Van Isacker, 2014). To ensure that online peer support communities can offer assistance on a range of topics, ‘a network of users must first be in place” (Wong and Cohen (2011, p 142). This involves active recruitment of community members to offer peer support for specific topics of interest and expertise as conducted for the EU Life Long Learning DigiPlace4all peer support community website (Magennis, Murphy, Lazaro, Van Isacker, 2014).

Considering the perspectives of the participants, this study recognises the positive impact establishing a national online peer support network to support both blind and visually impaired students and their special educational needs support teachers access queries and challenges in particular in relation to transition opportunities.

# *Research Recommendations*

This small scale pilot study has sought to raise and confirm several key access challenges for blind/visually impaired post primary students. The following is a summary of the recommendations identified from the analysis of the study. These recommendations encapsulate key areas that require attention by the education system and schools in order to ensure effective transition outcomes for blind and visually impaired students. It is recognised that significant progress has been made in supporting blind and visually impaired students especially through provision of the visiting teacher service. However, while a recent report from AHEAD (2015) demonstrates a positive trend for participation of blind and visually impaired students in third level, they are far less represented than other students with disabilities and their non-disabled peers. To maximise the potential impact and minimise costs, implementing these recommendations should be done in such a way as to exploit common themes where present as presented in Diagram A (captured in accessible text) which illustrates the interconnected strategy required to implement the new recommendations advanced in this study.



**Diagram A: Strategy for implementing new recommendations to provision for blind and visually impaired students.**

## Implementing the Individual Education Plan (IEP)

This study calls for the full implementation of the Individual Education Plan (IEP) provision as outlined in the EPSEN Act 2004.

The lack of Individual Education Plan (IEP) provision is the most significant challenge to ensuring appropriate access to supports and resources for blind and visually impaired post primary students. This absence has led to an ad-hoc system of supports and resources, directly impacting full comprehension and provision for the needs of blind and visually impaired students. Ultimately, it negatively impacts their inclusion in the mainstream classroom and transitions opportunities. Inherent to the IEP is the team-focused approach both among the school personnel and with the student and their family. This study reports the benefits of this approach to ensure individual student needs are regularly assessed and this information shared amongst relevant school personnel and their family. Implementing the IEP would ensure blind and visually impaired students are reasonably accommodated on an individual basis as recommended by the UN Convention of Human Rights (Article 24).

## Review Collaborative Framework between School Personnel and the Visiting Teacher Service with Students and Families, to make best use of Scarce Resources

Collaboration between blind and visually impaired students’ “support circles” is a critical factor to ensure the most effective and efficient provisioning of supports for blind/visually impaired students is facilitated, particularly in a resource constrained environment. This study recommends reviewing collaborative frameworks between school personnel and the visiting teacher service with students and families.

In this study examples of strong collaboration between visiting teachers and SNAs significantly benefitted blind and visually impaired students’ access. In addition, this study identifies that SNAs who have developed expertise in supporting blind and visually impaired students are a valuable resource within the education system. They can potentially share their knowledge by connecting with newly appointed SNAs supporting blind and visually impaired students in other schools. However, collaborative practices are reported as being ad hoc in nature, where in some cases there is strong collaboration across all school personnel, in others there are specific strong relationships with families and in some cases students felt they were relying on themselves and individual class teachers to support their visual disability needs. Given the lack of consistency reported in this study a review of current collaborative frameworks is recommended as well as clarity of roles and responsibilities.

As a starting point, this study strongly recommends convening a working group comprising of all stakeholders to review current supports and strategies to access the curriculum for students who are blind and visually impaired.

## Provision for Structured Transition Plan to Engage in Outreach Educational Support Activities between Post-Primary and Third Level Sectors

This study identifies a strong need for a structured transition link up policy plan at a national level between post primary schools and higher education sector. Early engagement between sectors is highlighted as a critical factor contributing to blind and visually impaired students’ effective transition outcomes. Informal links between post primary schools and neighbouring higher education institutions are reported to demonstrate successful outcomes. The Higher Education Authority funded South West Regional Alliance has proved effective in liaising between post primary schools to identify blind and visually impaired students’ needs, in particular the technology required to prepare them for their transition. This study identifies the positive transition outcomes achieved through structured outreach activities and calls for increased activities on a national scale to ensure the benefits of these activities reach all blind and visually impaired students in post primary schools. It is anticipated that this will lead to widening Irish higher education participation rates among blind and visually impaired students. In this study transition year is identified as the optimum time for blind and visually impaired students to engage with higher education outreach activities.

This study strongly recommends an extension of current outreach activity sponsored by the HEA to address needs of visually impaired/blind students throughout the country.

## Develop and Implement a Customised Plan for Transition Year to address the needs of blind/visually impaired students on a national basis

In order to adequately provide for the amount of additional skills required by blind and visually impaired students to reach their educational potential, this study proposes the development and implementation of a national customised plan for transition year (TY) as a key solution. This is required as part of structured transition planning. This customised TY plan would facilitate addressing students’ needs related to visual disability in an individualised, structured programme to ensure core learning requirements needed to fully access the Leaving Certificate curriculum are achieved.

Depending on an individual students visual disability needs certain core learning requirements will be identified. For example, for one student independent living skills related to mobility issues may be more of a priority need than for another student who requires additional support with technology training or Braille. While the aim of this programme would to be facilitate time to focus on critical needs related to visual disability, in its design it will also be necessary to ensure that blind and visually impaired students are included in whole class activities such as extracurricular trips.

## Provision of Tailored Career Guidance Support for Blind/Visually Impaired Students

Lack of effective career guidance sessions for blind and visually impaired students is reported in this study. Given the added complexities of planning and making transitions for blind and visually impaired students, the absence of specific guidance support is causing students additional stress in making transition choices. Alternative channels of support from school personnel including visiting teachers and families is reported. However, these sources of support report feeling ill equipped to offer advice outside their area of expertise.

It is recommended that a set of tailored materials be created for Guidance Counsellors so that they may have the right information to guide students through their available choices and understand the support available and plan accordingly.

This study strongly recommends prioritising the development of guidance materials designed to support transition process for blind and visually impaired students to post school placements.

## Review of the Provision for Reasonable Accommodations by the State Examinations Commission and by Schools

Ensuring that blind and visually impaired students are well practiced in the state examination process as well as provided sufficient accommodation for state examinations is critical to reaching their academic potential. To achieve the best possible transition outcomes for these students, this study recommends the provision for reasonable accommodations in exams should be kept under constant review by the State Examinations Commission and schools.

In preparation for the Leaving Certificate examinations, all students complete practice ‘mock’ exams. Blind and visually impaired students require access and crucially practice with these ‘mock’ examination papers prior to both these exams and the official Leaving Certificate examinations.

This study found that students may not receive mock papers in sufficient time to practice, or receive appropriate support during the mock exam process itself. Owing to these factors, blind and visually impaired students are experiencing considerable additional exam stress. This study highlights the need for increased awareness amongst school personnel about the exam paper modifications and exam process for blind and visually impaired students in post primary schools. This study advises that all school staff involved receive training in awareness of blind and visually impaired students’ examination needs.

This study identified that the existing Department of Education and Skills rules on additional time allocation for blind and visually impaired students to complete examinations is often insufficient. In particular, subjects requiring students to give lengthy written responses, (e.g. English and History), present blind and visually impaired students with time management issues. Currently blind and visually impaired students are allocated 20 minutes additional time for Irish, English, History and Geography. This study identifies the need to review this allocation to ensure it allows students time to complete exams. It is also recommended that blind and visually impaired students are given the option to complete exams using technology that is familiar and appropriate to their needs. This requires blind and visually students have suitable access to the most effective support their visual disability access needs. Combined with access to these technologies it is essential that blind and visually impaired students are supported in achieving competency in using these technologies.

## Specific Efforts to Address Mathematics and Physical Education Access Issues

The core subject learning needs highlighted as causing the most significant challenges for blind and visually impaired students in this study are Mathematics and Physical Education.

## Mathematics Inclusion and Technology Innovation Themes

Regular review of how new technology could be adapted to meet assistive needs may naturally aid in addressing any future challenges changes to the curriculum may bring, such as the latest introduction of the project mathematics curriculum.

Given the visual nature of maths, accessing this core curriculum subject proves problematic for blind and visually impaired students. This study found that the shift to Project Maths is compounding this struggle for this student cohort, as there is now an increased emphasis on visual depiction.

To overcome this challenge, this study recommends that blind and visually impaired students receive additional resource hours to “level the playing field” with their sighted peers. In addition, an investigation could be performed to identify a means for conveying the curriculum in a medium which suits blind and visually impaired students, while staying true to the new teaching philosophy, for example, 3D modelling.

In the case of Physical Education (P.E.), this study found that students are not fully participating in this subject. Students report feeling discriminated against because of their disability and feel excluded during this class. This study recommends that P.E. teachers receive training in teaching practices that ensure all of their students can participate in activities as much as possible. This study strongly recommends schools engage with trained professionals who support young people with disabilities, such as Camp Abilities and Vision Sports Ireland, to support teachers to provide accessible P.E. classes for blind and visually impaired students.

## Mobility Skills as part of Physical Education

Mobility skills are identified as a core learning requirement for blind and visually impaired students. The ability of the student to independently access the school environment is essential to their full participation at school. In addition, poor mobility skills are also associated with lower levels of confidence among blind and visually impaired students.

To address this need it is suggested that mobility form part of the physical education guidelines to aid in formalizing its development and that the collaborative framework outlined earlier be used to resource the specific skillsets required.

## P.E. Inclusion and Mobility Themes

Given the commonalities here, connecting P.E. teachers with organisations that provide mobility training would have natural positive knock on effects in providing these teachers with insights into possible inclusive P.E. activities.

## Mathematics Inclusion and Technology Innovation Themes

Regular review of how new technology could be adapted to meet assistive needs may naturally aid in addressing any future challenges changes to the curriculum may bring, such as the latest introduction of the project mathematics curriculum.

## Greater Exploitation of “Mainstream” Technology to Address Assistive Needs

Proficiency and access to assistive technology and assistive functions in mainstream technologies is key to supporting curriculum access for blind and visually impaired students. However, this study identified technology gaps hampering both learning and inclusion. In particular, this study identified the Opti Verso equipment as contributing to considerable additional stress for visually impaired students as it regularly breaks down leaving students with reduced or no access to the entire core curriculum.

This study recommends that the Department of Education and Skills review existing practices around assessment for equipment on a more regular basis. This would take into account most significantly the changing visual disability needs of students and match them with the advancement of technologies, especially within the mainstream arena. Given the on-going developments of mainstream technologies and their ever-increasing in-built assistive functionalities this is likely to be a cost effective measure. Another advantage of enabling blind and visually impaired students’ access to mainstream technologies is the benefit for social inclusion. IPads are for example, reported as having the credibility among young people. This is significant as students are reported to engage more enthusiastically and effectively with equipment that allows them to fit in and feel like “everyone else”. [[6]](#footnote-7) In this study it is also reported that access to support from professionals who can support them with using their technology is essential.

## Align Braille and Print Materials Delivery

For blind students Braille literacy is a core-learning requirement. Continued Braille learning is advised to ensure blind and visually impaired students can access curriculum. Hence, prolonged delays in receiving Braille core curriculum materials as a significant access barrier.

This study acknowledges the lead in time required for the National Braille Production Centre to produce materials and recommends that regulations be developed in collaboration with school personnel to ensure that once curriculum course materials are ordered changes cannot be made later than the time required to produce Braille and other alternative format materials.

## Establishing Peer Support Networks to Reduce Burden on Scarce Resources

This study identified proactive practices among school personnel especially visiting teachers who set up peer support relationships. These relationships worked for professionals including SNAs and evidence of some innovative grassroots efforts to set up networks between visiting teachers at designated schools to connect blind and visually impaired young people to share information about technology and mobility issues. Féach, the support group for families with blind and visually impaired children report the benefit of connecting with families to support one another and share information on new technologies, funding advice and extracurricular activities for their children. However, the challenge of engaging with hard to reach families for geographical and social factors is reported. To overcome the challenge of connecting professionals and families this study recommends developing an online peer support community for both blind and visually impaired students and the professionals supporting them. To build a sustainable online peer support community system and school support is strongly recommended.

Finally, this study recommends as a first step to implementing these research recommendations the co-ordination of a strategic meeting to bring together a collaborative team of stakeholders e.g. visiting teacher service, schools, family advocacy group representatives and students to address these issues.

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6. 3The need for alternative to the Opti Verso as identified in this study has subsequently led to the development of a low vision aid application using a mash-up of generic consumer technology. A proof of concept test was carried out with one of the student participants. Results of this test will be published later this year. While this application is a direct result of this study it is a separate activity. [↑](#footnote-ref-7)