

**The
Additional Supports Required
by Pupils with Special Educational
Needs in Irish Medium
Schools**



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An Chomhairle um Oideachas
Gaeltacha & Gaelscolaíochta



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LIST OF ABBREVIATIONS

ADD	Attention Deficit Disorder
ADHD	Attention Deficit Hyperactivity Disorder
ASD	Autism Spectrum Disorder
COGG	An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta
DCD	Developmental Co-ordination Delay
DENI	Department of Education Northern Ireland
DES	Department of Education and Skills (RoI)
EA	Education Authority
EAL	English as an Additional Language
EBD	Emotional/Behavioural Disturbance
EPSEN	Education for Persons with Special Educational Needs Act 2004
GAM	General Allocation Model
GLD	General Learning Disability
GoI	Government of Ireland
GUI	Growing Up in Ireland study
IASLT	Irish Association of Speech and Language Therapists
IEP	Individual Education Plan

IM	Irish-medium
IQ	Intelligence Quotient
LLD	Language Learning Disability
L1	First Language
L2	Second Language
L3	Third Language
MIST	Middle Infant Screening Test
MM	Mixed Methods
NCCA	National Council for Curriculum Assessment
NCSE	National Council for Special Education
NEPS	National Educational Psychological Service
NEWB	National Education Welfare Board
NI	Northern Ireland
RoI	Republic of Ireland
UK	United Kingdom
USA	United States of America

1.1 Introduction

This chapter introduces the present study which investigates the additional supports required by pupils with special educational needs (SEN) in primary Irish-medium (IM) schools. The aims of the present study were to: (i) investigate the prevalence rate of pupils with SEN in IM schools and the current practices in place in to meet the needs of these pupils, (ii) critically examine the benefits (if any) that these pupils receive from being educated through Irish as a second language (L2), (iii) evaluate the challenges encountered when educating children with SEN through Irish as a L2, (iv) assess the additional supports required for the education of pupils with SEN through Irish, and (v) make recommendations as to how the challenges experienced by pupils, parents, and teachers can be overcome using internationally recommended practices. This chapter will also provide a context for the research questions of the present study which are outlined in further detail below. These research questions were investigated through the use of a sequential mixed methods approach. A quantitative survey was undertaken by a proportionate randomised stratified sample of 20% (N=29) of IM schools in the Republic of Ireland (RoI) in the first stage. Case studies were undertaken in the second stage, in four IM schools, three in the RoI and one in Northern Ireland (NI). These case studies included four pupils with autism spectrum disorder (ASD), four pupils with dyslexia, and three with specific speech and language disorder (SSLD). Semi-structured interviews were conducted with the pupils' parents (N=9), school principal (N=4), special education teacher (N=4), class teacher (N=10), and special needs assistant (SNA) (N=1). Participants were asked about their experiences of SEN provision in IM schools, the challenges

of educating pupils with SEN through Irish, and the benefits, if any. In class observations were also undertaken, to evaluate the practices in place to meet the needs of these pupils. Along with this, interviews were conducted with a group of parents (N=6) who transferred their child from an IM school to an English-medium school due to their SEN, to assess the challenges they faced and their reasons for transfer. Pupil voice was also included in the present study; interviews were undertaken with the pupils enrolled in IM schools (N=9). These interviews investigated the pupils' perspectives and experiences of IM education. The data generated within stage two was analysed using thematic analysis (Braun & Clarke, 2006). Significant findings emerged which informed the construction of recommendations in relation to the development of SEN policy, practices, and provision in IM schools.

The research rationale of the study is also outlined in this chapter. A brief overview of the important terminology that features throughout the thesis is provided. As the research includes schools in the RoI and NI, the context of SEN policy and provision in both jurisdictions is evaluated. International and national SEN prevalence rates are also analysed to provide a context for the findings of the study. The chapter concludes with an outline of the structure of the present study.

1.2 Research Rationale & Questions

In 2010, the Irish Government (RoI) published a 20-year strategy for the Irish language. The aim of this strategy is to improve the use and knowledge of Irish through an integrated approach across Government departments in the areas of: education, the Gaeltacht, the family, public services, media and technology, dictionaries, legislation, economy, and cross-cutting initiatives (see Department of Education and Skills (DES), 2015a for further details). Objective 6 of this strategy is to provide and support a high standard of IM education at both primary and post-primary level, stating that "specific advice will be offered to support the bilingual needs of children with special needs" (DES, 2015a, p. 16). This

present study is being funded by An Chomhairle um Oideachais Gaeltachta agus Gaelscolaíochta (2019), the council for IM education, which is listed within the 20-year strategy an advisor to the Government. Hence, the research conducted in the present study will inform the development of future policies, practices, and strategies. The present study, which is similar to a needs assessment, coincides with the recommendation made for the creation and implementation of an all-Ireland support system for those delivering SEN provision through the medium of Irish. It was recommended that this system is underpinned by an all-island research strategy and internationally recommended practices (COGG, 2010, p. 3). Findings and recommendations from the present study will inform the creation of a support structure for schools which will provide greater confidence in IM education by stakeholders, such as, parents, health workers, service providers, and educators (COGG, 2010, p. 3).

The additional supports required by pupils with SEN in IM schools was chosen as a title of the present study, as the aim of the research is to investigate what supports are currently in place in IM schools and what additional supports need to be made available to enable pupils with SEN to access the curriculum and reach their potential when learning through Irish as a L2. When formulating this title, the researcher was not suggesting that pupils with SEN in IM schools need any extra supports, further to those required by pupils with SEN in English-medium schools. The title is based on the primary research question; what are the additional supports required by pupils with SEN in IM schools? The sub-research questions of the study are as follows: (i) what are the current prevalence rates of pupils with SEN in IM schools?, (ii) how many pupils in these schools are receiving additional support from the special education teacher?, (iii) what are the methods used by IM schools for selecting pupils for this additional support?, (iv) what external support services are provided through the medium of Irish to these schools?, (v) how many pupils with SEN have transferred from IM schools from September 2014- September 2017?, (vi) what are the educational practices in place in IM schools to meet the needs of pupils with SEN?, (vii)

what are the benefits of IM education for pupils with SEN?, (viii) what are the challenges of educating pupils with SEN through the medium of Irish? and (ix) what are the similarities and differences between SEN provision in IM education and immersion education internationally?

To gain a comprehensive overview of the additional supports required by pupils with SEN in IM schools, this research incorporated a two stage, sequential, mixed methods approach. In stage one, quantitative survey research was used to assess the prevalence, and categories of SEN in a 20% sample of IM schools (N=29) in the RoI (N=145). The present research is important as it assesses the current SEN prevalence rates using a proportionate randomised stratified sample, this guaranteed that all school types/sizes, in all geographical locations had an equal chance of being included. Previous survey research on this topic did not utilise this sampling method and this in turn could have influenced non-response bias. Furthermore, the findings of the present study allow for a comparison of findings from the last 10 years and an analysis of any changes that may have occurred in SEN prevalence rates and provision during this time. In the second stage, case studies were undertaken. Here interviews and observations were conducted to assess the additional supports required by pupils with ASD, dyslexia, and a SSLLD when learning through Irish. These categories of SEN were chosen, as children within these categories often experience difficulties in language and communication. There has been much debate regarding the suitability of bilingualism (which is the product of immersion education) for individuals within these categories of SEN due to their language and communication difficulties.

As is described in the literature reviewed in Chapter 2, bilingualism for children with SEN is a relatively new research topic. Research has shown that children with ASD, SSLLD, and dyslexia can acquire a L2 with no negative impact on their first language (L1) development (Bonifacci & Tobia, 2016; Kay-Raining Bird, Genesee, & Verhoeven, 2016). However, their level of L2 attainment depends on their L1 abilities and the amount of exposure they receive to the L2

(Chung & Ho, 2010; Kay-Raining Bird et al., 2016). Internationally, a paucity of research exists in relation to the suitability of immersion education for children with SEN. Of the limited studies conducted, it has been found that parents are often advised by educational professionals against bilingualism and immersion education for their children with SEN (Kay-Raining Bird et al., 2016; Yu, 2013). To date, there are only three known studies in the area of SEN provision in IM schools throughout the RoI (Barrett, 2016; Nic Gabhann, 2008) and NI (Ní Chinnéide, 2009). Previous studies have assessed the prevalence rates of SEN in IM schools, the challenges faced by schools, and the practices in place to meet the needs of these pupils through survey research (Barrett, 2016; Nic Gabhann, 2008; Ní Chinnéide, 2009). One study also conducted interviews with school stakeholders to evaluate SEN provision in IM schools in NI (Ní Chinnéide, 2009). The need for further research in the area of special education provision has been reinforced and reiterated at a national level since 2004 (Department of Education and Science, 2004; Mac Donnacha, 2004; NCCA, 2007a; Ní Chinnéide, 2009). Hence, the present study is significant as it addresses the recommendation for further research in this area. It also adds to the limited research available on the suitability of IM education for pupils with SEN and the limited international research surrounding bilingualism and immersion education for children with SEN.

1.3 Irish-medium (IM) Education

In IM schools, all curriculum subjects are taught through the medium of Irish, except for English. This means, for example, that a lesson on 'measurement' in mathematics, is taught through Irish, the focus of the lesson is on the subject content (measurement), rather than the teaching of Irish itself (Cummins, 2009). "The term 'Gaeltacht' is used to denote those areas in Ireland where the Irish language is, or was until the recent past, the main spoken language of a substantial number of the local population" (Údarás na Gaeltachta, 2017). Children attending Gaeltacht schools may or may not come from homes where

Irish is their native language. This is due to the complex socio-linguistic context of these schools (DES, 2017f, p. 6). Therefore, a Gaeltacht school adapts its teaching pedagogies to meet the needs of native Irish speaking pupils who are not immersed in a new language in school and those learning through Irish as a L2. Gaeltacht schools who deliver their instruction through Irish, can be considered both heritage language schools (for native speakers) and immersion education contexts (for those with Irish as a L2) (DES, 2017f). The present research does not include Gaeltacht schools. In IM schools in the RoI, pupils receive up to 2 school years' total immersion in the Irish language, before they commence English as a curriculum subject (DES, 2015b; NCCA, 2015). This allows students to develop greater proficiency in Irish (DES, 2015c). Pupils in IM schools in NI receive up to 3 years' total immersion in the Irish language before they engage with the English curriculum in Key Stage One, Year 3/4, ages 6-8 years old (McKendry, 2006; Ní Chinnéide, 2009; Ó Duibhir, Nig Uidhir, Ó Cathalláin, Ní Thuairisg, & Cosgrove, 2015). At the time of the present study, there were 180 IM primary schools throughout the island of Ireland (Gaeloideachas Teo., 2017). The distribution of these schools for the academic year 2017/2018 shows that most schools (N=145) and pupils were situated in the RoI. There were 35 schools in NI, of these 28 were stand-alone schools and seven were Irish language units attached to English-medium host schools. In these units the curriculum is delivered through Irish even though they are under the governance of their English-medium host school. The policy and practices of IM schools is discussed in further detail in Chapter 2.

1.4 Inclusion

The definition of SEN used in the Education for Persons with Special Educational Needs (EPSEN) Act (Government of Ireland (GoI), 2004a) is adopted within this research. The Act is discussed in more detail below. Within the Act, a special educational need is defined as:

a restriction in the capacity of the person to participate in and benefit from education on account of enduring physical, sensory, mental health or learning disability or any other condition which results in a person learning differently from a person without that condition (Gol, 2004a, p. 6).

There have been many factors which have contributed to the “complex and multi-layered” policy process surrounding inclusive education for children with SEN (Hill, 2005, p. 4). Initially, the primary focus for the care and education of these children was based on the medical model of provision. Originally, it was thought that the difficulties people with SEN faced were primarily due “to their own personal inadequacies or functional limitations” (Oliver, 1990, p. 7). Initially, pupils with SEN were integrated into mainstream schools. The focus of integrating pupils with SEN into mainstream schools was to ‘fix’ the pupil in order for them to ‘fit’ into the educational system (Oliver, 1990). However, this opinion has changed over the last two decades and a humanistic, social model of provision, based on equality and universal access to mainstream resources has been promoted (Doyle, 2003, p. 26). The focus of SEN provision then became the inclusion of pupils with SEN in mainstream schools. Inclusion differs from integration, as it does not require the pupil to adapt to the education system, it is the belief that all pupils are different, all pupils can learn, and that the school system needs to be adapted to meet the needs of the pupils rather than vice versa (Florian, 2014). Due to this, the number of pupils with SEN being included in mainstream education has increased (Stevens & O’Moore, 2009; Ware, Butler, Robertson, O’ Donnell, & Gould, 2011). There has been much debate surrounding the definition of inclusion (Florian 1998; Florian, 2014; Slee, 2001). Internationally there is no single universally accepted definition (Florian, 2014; Winter & O’Raw, 2010). The theory of inclusion is based on the fundamental human right, that all children regardless of their ability have the same right to education (Winter & O’Raw, 2010). Within the Education Act, inclusion is promoted as the “equality of access to and participation in education” (Gol,

1998, Section 6). It can also be defined as the process of meeting the needs of a diverse group of pupils, enabling them to participate in learning and all activities in school (Winter & O’Raw, 2010, p. 39). This is achieved through the removal of barriers within the education system, treating all pupils equally, devising accommodations to enable all pupils to access the curriculum, and empowering them to reach their potential (Ainscow, Both, & Dyson, 2006, p. 297). Within the present study, inclusion is defined by the researcher as; valuing all pupils as equal, building relationships within the school community so that everybody feels like they belong and that they have something to contribute to the school community, it is the removal of barriers and the undertaking of continuous professional development, so that all pupils can reach their potential and are happy in school. Research recommends that a whole-school approach is adopted for the inclusion of all pupils. In the RoI, the Department of Education and Skills (DES, 2017d, p. 21) states that an inclusive school environment has:

- A positive ethos and learning environment whereby all pupils, including those with SEN, feel welcome and experience a sense of community and belonging,
- An emphasis on promoting pupils’ participation and active engagement in their learning and in the life of the school,
- A commitment to developing pupils’ academic, social, emotional, and independent living skills, and
- A focus on high aspirations and on improving outcomes for all pupils.

In NI, the Department of Education (DENI, 2011a) has stated that inclusive schools have similar characteristics, such as, they hold a child-centred school ethos and culture that promotes high expectations for all children. Parental and community involvement is encouraged and supported. Parents and pupils are included in establishing and reviewing education plans, which focus on the holistic development of children (see DENI, 2011a, p. 11-12 for further details).

1.5 Special Educational Needs (SEN) Policy & Practice in the Republic of Ireland

Both the RoI and NI have experienced significant change in special education provision over recent decades. Much of this change has involved the implementation of similar policies and principles over a comparable timeline (O'Connor, Hansson, & Keating, 2012, p. 13). The evolution of policy and practice can be attributed to several factors: international equality movements, government publication of reports, policy documents and legislation, and parental litigation cases. Within this section, a review is undertaken of the impact of parental litigation cases and legislation on SEN provision in the RoI, the methods used to select pupils in primary schools for additional support, and how this additional support is provided.

1.5.1 Legislation.

As international equality movements paved the way for inclusive education, national weaknesses in SEN provision were highlighted by the Special Education Review Committee (SERC) report (DES, 1993). This report was undertaken to make recommendations regarding the identification and assessment of children with SEN, the implementation of appropriate support services, and the integration of pupils to mainstream schools. Within the report, the Government's objectives regarding future special education provision were declared. It was recommended that the inclusion of pupils with SEN in mainstream education was undertaken and that these pupils would experience as little segregation from their mainstream peers as possible (DES, 1993). Also, around this time, landmark parental litigation cases taken against the Government challenged the lack of state provision for children with SEN (Carey, 2005; NCSE, 2011b; Whyte, 2002, p. 177). The result of these cases caused a positive change in SEN provision and the implementation of more inclusive practices. In the case, O'Donoghue v. The Minister for Health, Minister for Education (1993) it was found that the state had failed to provide for the education of a boy, aged 8,

with severe disabilities (see Economic, Social, and Cultural Rights, 2019 for full report on case; O'Donoghue v. The Minister for Health, Minister for Education, 1993). Similarly, the Sinnott case (2001) challenged the Government due to the lack of appropriate educational provision for an autistic boy. The result of these cases increased the educational provision available for children with severe and profound general learning disabilities (GLD) (see Baili, 2001, for full report; Sinnott v. Minister for Education, 2000; 2001). Another significant parental litigation case was that of Ó'Cuanacháin v. The Minister for Education and Science (2007). In this case, the parents of a 6-year-old boy with ASD challenged the Minister of Education and Science regarding the educational provision available for their son. These parents wanted access to ABA tuition for their child for 30 hours a week. The ruling of the case found that the Department of Education was providing adequate SEN provision for the child and that there was a need for further professional development in special education to be made available to teachers.

Since the occurrence of these parental litigation cases, legislation has been implemented to safeguard those with learning difficulties against discrimination and improve their access to services. The first piece of legislation implemented was the Education Act (1998) which states that schools are legally obliged to deliver education to meet a range of varying needs and a diversity of traditions and values (GoI, 1998, Section 21, Sub-section 2). Following this, the Education Welfare Act (2000) (GoI, 2000a), Equal Status Act (2000) (GoI, 2000b), Education for Person with Special Educational Needs (EPSEN, GoI, 2004), and the Disability Act (GoI, 2005) have also legislated for more inclusive learning environments without discrimination. Within this section, the EPSEN Act (2004) will be reviewed as it "imposes very specific obligations on principals/teachers in the area of SEN" (Meaney, Monahan, & Kieran, 2005, p. 216). The responsibilities of the principal, boards of management, the school, and the National Council for Special Education (NCSE) when identifying and assessing pupils with SEN are outlined (see GoI, 2004, for further details). The role of the NCSE is to allocate

appropriate resources to pupils through processing applications for additional teaching resources, SNA support, assistive technology, and transport. They also advise schools and parents regarding facilities, services, and resources for pupils with SEN (see NCSE, 2018b for further details). Nevertheless, the failure to enact the EPSEN Act (2004) in its entirety has led to a slow progression towards a fully inclusive education system and it fails to guarantee automatic access to mainstream education for pupils with SEN (O'Connor et al., 2012).

1.5.2 SEN Provision & Allocation of Resources: Republic of Ireland (RoI).

A multi-track model of provision is implemented in primary schools in the RoI, where pupils are catered for in special schools, special classes in mainstream schools, or mainstream education (Banks & McCoy, 2011). A special class attached to a mainstream school may cater for pupils with a specific condition or range of conditions. Pupils in a special class and those attending special schools, experience smaller class sizes, with often only six pupils per class. Smaller class sizes and increased funding help schools to meet the complex or severe needs of pupils (see NCSE, 2014a for further details). This study will not include pupils attending special schools, as there are no IM special schools in the RoI or NI. It will, however, include pupils in mainstream classes and those in special classes in mainstream schools. Pupils with SEN attending mainstream classes may receive additional resources and supplementary teaching. For example, a SNA is allocated to a school to provide additional support to children with SEN who have additional or significant care needs that are beyond the typical care provided by classroom teachers, school staff, and other pupils, or when the pupil is a danger to themselves or others (see DES, 2014, pp. 5-7 for full details of SNA role). In May 2018, there were 9,244 SNAs employed in primary schools throughout the RoI (NCSE, 2018c). Under section 22(1) of the Education Act (1998), the class teacher is responsible for the care, teaching, and learning of all children in their class. It is their duty to teach all pupils, regardless of their ability, in a structured and supportive environment, whilst the duty of the SNA is to assist in this process (DES, 2014). External supports available to schools

include the services of the National Educational Psychological Service (NEPS, 2019), the National Educational Welfare Board (Tusla, 2019), the Health Service Executive (HSE, 2019), the National Centre for Technology in Education (NCTE, 2019), the Special Education Support Service (SESS, 2019), and the Professional Development Service for Teachers (PDST, 2019).

1.5.3 The Special Education Teacher Allocation (RoI).

The special education teacher allocation was implemented in the academic year 2017/2018 (DES, 2017a). This model replaced the General Allocation Model (GAM), English as an Additional Language (EAL) scheme (DES, 2005a; DES, 2012), and the system of allocating additional supports and teaching resources to pupils with low incidence SEN by the NCSE (DES, 2005a). The GAM was first introduced to primary schools in 2005, it provided additional teaching support to pupils with high incidence SEN, those with learning support needs, and from the academic year 2012/2013 it was expanded to include EAL pupils (DES, 2017a, p.4). The special education teacher allocation now provides a "single unified allocation for special education teaching needs to each school, based on the school's educational profile" (DES, 2017a, p. 1). The change in the structure for allocating teaching resources to schools occurred, as it was suggested that the other models of provision caused delays for pupils when accessing assessment and additional support teaching hours. It was also highlighted that the GAM, which was based on the number of mainstream classes in a school, took little account of the varying needs of schools. Furthermore, there was a risk that pupils were being diagnosed for the sole purpose of obtaining resource teaching hours (see NCSE, 2014c for further details). Now schools are allocated additional teaching supports based on their school profile in the relation to: (i) the number of pupils they have enrolled with complex needs, (ii) the learning support needs of pupils based on the results of standardised tests (English literacy, Irish literacy (IM schools only), and mathematics), and (iii) the social context of the school (gender breakdown and socio-economic status). Within the special education teacher allocation, it is advised that the individualised learning needs of pupils

should be “addressed in a variety of ways and should not be solely equated with withdrawal from class for one-to-one tuition or group tuition” (DES, 2017b, p.18). The practice of moving away from individual withdrawal towards in-class support in order to create an inclusive school culture which appropriately meets the needs of pupils with SEN has also been recommended in other studies on the barriers to inclusion (Ring & Travers, 2005; Travers et al., 2010). In IM schools, the additional teaching support provided may be through the medium of Irish, English, or a combination of both. For example, support can be provided in English language and literacy, mathematics through Irish/English, and Irish language and literacy. At the start of the implementation of this model (September 2017) there were 13,281 special education teachers employed in primary and post-primary schools. This number increased to 13,395.8 in December 2018, with 9,226 of these teachers employed in primary schools and 4,129.8 in post-primary schools.

1.5.4 Pupil Identification & Intervention (Rol).

A three-staged model for the identification and assessment of pupils with SEN is implemented in all primary schools (see Figure 1.1). These stages involve: (i) classroom support, (ii) school support, and (iii) intensive pupil assessment by a professional, such as, an educational psychologist or speech and language therapist. Within the first stage a school plan is put in place for a pupil and reviewed after a designated period of time. Practices such as meeting parents, teacher observations, teacher designed tasks, checklists, screening tests, and pupil consultation are recommended within this stage (see DES, 2017d for further details). If this level of intervention is unsuccessful, a school support plan is undertaken in the second stage. This plan lists measures for assessment (e.g. diagnostic assessment and functional screening measures) and it may also include a list of the suitable teaching methods that will be undertaken with the pupil. After this, if the pupil is still experiencing difficulties, the final stage, school support plus, is implemented. This stage entails more detailed planning that may be for a longer period of time. This plan includes information from assessments

undertaken by outside professionals. Within the continuum, teaching should incorporate the use of evidence-based practices to build on the strengths of the pupil whilst addressing their areas of need. All educational support plans should include achievable targets, a list of resources, the teaching strategies to be implemented within the plan, and a review date (see DES, 2017d, p. 12)

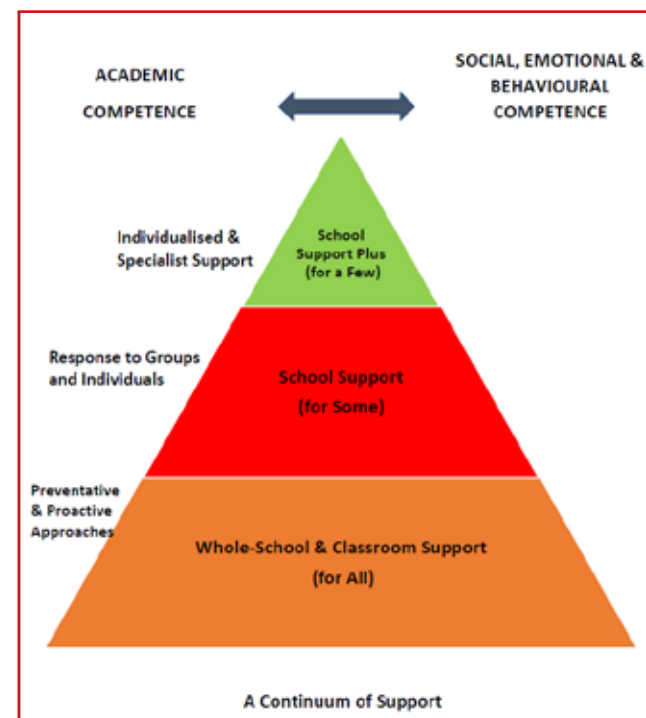


Figure 1.1 The continuum of support for identifying and responding to SEN in Irish primary schools ([www. https://www.sess.ie/special-education-teacher-allocation/primary/continuum-support-primary](https://www.sess.ie/special-education-teacher-allocation/primary/continuum-support-primary)) (Retrieved on 7/9/2019).

It is recommended that class teachers and special education teachers adapt a supportive role when educating pupils with SEN. Guidelines by the Department of Education (DES, 2017d, p. 12/13) state that a range of teaching methods, such as, co-operative teaching, collaborative problem-solving, heterogeneous group

work, differentiation, active learning, small-group tuition, individual teaching, scaffolded instruction, and Information and Communications Technology (ICT) should be adopted by teachers to foster inclusion. Team-teaching allows for the collaboration of ideas, impacts positively on pupil behaviour, and allows for differentiation, while it is also suggested that it provides greater support and inclusion to pupils (PDST, 2019b). It is important that the special education teacher is familiar with these teaching methods. They may provide support to pupils through in-class team teaching or small group/individual withdrawal.

Research suggests that the use of ICT for pupils with SEN fosters a more inclusive learning environment. It is suggested that ICT can help overcome the dilemmas pupils and schools face in relation to SEN identification, curriculum access, and location (Norwich, 2008). Florian & Hegarty (2004) propose that the use of this resource can foster greater inclusion for pupils in mainstream classrooms and in society in general. In the context of the mainstream classroom, ICT promotes differentiated instruction and a creative learning environment, whilst it also supports teachers (Starcic, 2010; Starcic, Cotic, & Zajc, 2013). For children with ASD, interventions using ICT have been found to be more suitable due to them being less socially threatening than face to face interactions (Goodwin, 2008; Rajendran, Mitchell, & Rickards, 2005). They have also been found to be more consistent with the autistic style of learning (Rajendran & Mitchell, 2007; Kagohara et al., 2013 Konstantinidis et al., 2009).

1.5.5 Exemption from Studying Irish (Rol).

Pupils in English-medium primary and post-primary schools in the Rol may access an exemption from studying the subject of Irish due to their SEN (DES, 2019, Circular 0052/2019). Within Circular 0052/2019 (DES, 2019), it is suggested that exemptions should only be granted to pupils in exceptional circumstances. An exemption from studying Irish as a subject is granted by the school's principal teacher following consultation with the pupil, parents, and teachers (DES, 2019, p.3). The criteria for allocating exemptions is based on the country in which the

child received their education up to 12 years of age, their SEN, and whether their parent is a foreign diplomat living/working in Ireland (DES, 2019, p.3):

(i) pupils whose education up to 12 years of age (or up to and including the final year of their primary education) was received outside the State and where they did not have opportunity to engage in the study of Irish

Or

(ii) pupils who were previously enrolled as recognised pupils in primary schools who are being re-enrolled after a period spent abroad, provided that at least three consecutive years have elapsed since the previous enrolment in the state and are at least 12 years of age on re-enrolment

Or

(iii) pupils who: (i). have at least reached second class and (ii). present with significant learning difficulties that are persistent despite having had access to a differentiated approach to language and literacy learning in both Irish and English over time. (iii). at the time of the application for exemption present with a standardised score on a discrete test in either Word Reading, Reading Comprehension or Spelling at/below the 10th percentile.

Or

(iv) children of foreigners who are diplomatic or consular representatives in Ireland.

Before the implementation of Circular 0052/2019, exemptions from studying Irish were granted in primary schools under Circular 12/96 (DES, 1996) and in post-primary school under Circular M10/94 (DES, 1994). Under Circular 12/96, for the academic school year 2016/2017, there were 5,385 pupils enrolled in primary schools with an Irish exemption. The most common reason cited for this exemption being granted was a learning difficulty (N=4,167 or 77.8% of all exemptions) (see DES, 2017e; DES, 2018b, for further details). Pupils who obtained an exemption

prior to the implementation of Circular 0052/2019 will be entitled to continue with their exemption until the end of their post-primary schooling.

1.5.6 Educational Disadvantage (RoI).

Schools that have been identified as being in areas of low socio-economic status (SES), and where children are at risk of educational disadvantage receive additional supports from the Department of Education and Skills (DES) under the Delivering Equality of Opportunity in Schools (DEIS) programme (see DES, 2015d). In total there are 640 primary schools included in this programme. Of these schools 2.34% (N=15) are IM schools. Schools participating in this programme are divided into two categories, DEIS Band 1, and DEIS Band 2. Schools in Band 1, are thought to be at a higher risk of educational disadvantage, and they receive more supports than Band 2 schools. For example, these schools have a lower pupil teacher ratio than other schools (see DES, 2017c, for full staffing allocation). All DEIS schools receive a grant to help meet the needs of pupils who are most at risk (DES, 2015d). This funding should be used to help identify pupils with literacy and numeracy difficulties, to implement strategies to enable pupils to overcome these difficulties, to develop home-school community relations, and to improve school attendance and pupil retention rates (see DES, 2015d for further details). Home school community partnerships are fostered in these schools through the work of the Home School Community Liaison officer. Their duties are: to promote partnerships between teachers and parents, work collaboratively with the local community, enhance the learning opportunities of pupils through these partnerships and collaboration, and to promote pupil retention in education (see DES, 2005b, for further details). In the RoI, the SEN prevalence rate for 9-year-old children in DEIS schools was identified at 7.4% of pupils in DEIS Band 2 schools and 12.1% in Band 1 schools (Cosgrove, McKeown, Travers, Lysaght, Ní Bhroin, & Archer, 2014). While post-primary pupils (1st year, Age 12-13) are one and a half times more likely to have SEN if enrolled in a DEIS school (Cosgrove, McKeown, Travers, Lysaght, Ní Bhroin & Archer, 2018).

1.6 SEN Policy & Provision in Northern Ireland (NI): Legislation

In NI, the Education (NI) Order (1996) (Northern Ireland Orders in Council, 1996), as amended by the SEN and Disability (NI) Order (2005) (DENI, 2005), and the SEN and Disability (NI) Act (2016) (DENI, 2016, 2018b), govern the provision of supports for children with SEN. The Code of Practice (1998) (Department of Education, Northern Ireland (DENI), 1998) supports this legislation and is reviewed in further detail below. At the time of the present study, the NI Assembly was working on implementing a new SEN framework. This framework is to incorporate four elements: (i) primary legislation (SEND Act, 2016), (ii) secondary legislation (new SEN regulations), (iii) guidance (new statutory Code of Practice), and (iv) a SEN professional development framework for teachers, principals, school staff, boards of governors, and the Education Authorities (EA). The SEND Act (2016) received Royal Assent in March 2016 and outlines the duties of boards of governors, the Education Authority (EA), health, and social services authorities. It also outlines the new rights of parents and children (from school age) in relation to SEN provision, and the new arrangements for personal learning plans (see DENI, SEND Act, 2016, for further details). The other three elements of the framework have yet to be approved. However, it is anticipated that these regulations will provide strengthened legislation (DENI, 2018b).

1.6.1 Pupil Identification & Intervention (NI).

Within the Code of Practice (DENI, 1998) procedures for the identification and assessment of pupils with SEN are outlined. A five-staged intervention approach is adopted by schools. When pupils are listed on any of these stages, they are listed on the SEN register of the school. In stage one the teacher observes and notes the learning difficulties of the child. An individualised school-based programme of learning and assessment is devised and implemented for the child in stage two. In stage three, schools may seek specialist guidance from a range of educational professionals and parents may request a statutory assessment which occurs in stage four. Here, written advice is sought from a variety of sources, such

as educational psychologists and medical officers. Stage five involves eligible pupils gaining a statement of need and the required additional resources are made available to them (see DENI, 1998, for further information on statements). A statement is a document which outlines the needs of pupils with SEN and the additional supports required by them to access education efficiently (see Northern Ireland Commissioner and Young People, 2015, p. 5 for further details).

1.6.2 SEN Provision & the Allocation of Resources (NI).

All mainstream schools in NI must appoint a teacher as a Special Educational Needs Co-ordinator (SENCO). This person is responsible for the daily implementation of the school's SEN policy. Their suggested areas of co-ordination are: (i) strategic direction, (ii) teaching and learning, (iii) leading and managing staff, and (iv) the efficient/effective development of staff and resources (NHAT, 2017). There are variations in the number of hours spent by the SENCO on these duties as teachers can work in the capacity of SENCO full-time, or they can be classroom teachers or school principals, with these additional responsibilities. In some schools, teachers have full classroom teaching duties and therefore undertake their SENCO duties outside of teaching hours. This means that they are unable to provide additional teaching support to pupils with SEN. Schools may also be allocated a classroom assistant for pupils with SEN, these may also be known as a teaching assistant. Their role and responsibilities are similar to those of the SNA in the RoI (see Education Authority, 2017, for further details). An 'Access Statement to Ensure Equality of Opportunity for All' is included within the primary curriculum at all class levels to insure the inclusion of all pupils (Council for the Curriculum, Examinations, and Assessments (CCEA), 2007). These statements provide teachers with ideas and suggestions as to how classroom learning activities can be adapted and differentiated so pupils can learn at a level that is appropriate and challenging for them. Additional teaching resources are also available from the CCEA (2007). Schools have access to external services provided by their EA, such as, educational psychology, parental support services, behavioural support services, and educational welfare services.

1.6.3 Educational Disadvantage (NI).

The 'Extended Schools Programme' was set up in May 2006 by the Department of Education (NI) to provide additional support to children living and attending school in the most disadvantaged areas (for criteria see DENI, 2017, p.1). Supports for pupils may be implemented in the form of breakfast/homework clubs and after school activities, such as, sport, art, and drama. It also suggests that programmes are implemented in schools to support parents, families, and the local community. It is anticipated that these supports will raise school standards, promote healthy lifestyles, and meet the learning and development needs of pupils and their families (ibid). It is important to recognise that most IM schools in NI are located in areas of low SES and are part of this programme. For the academic school year 2017/2018, there were 21 stand-alone IM schools (N=28) included in this programme (see DENI, 2019).

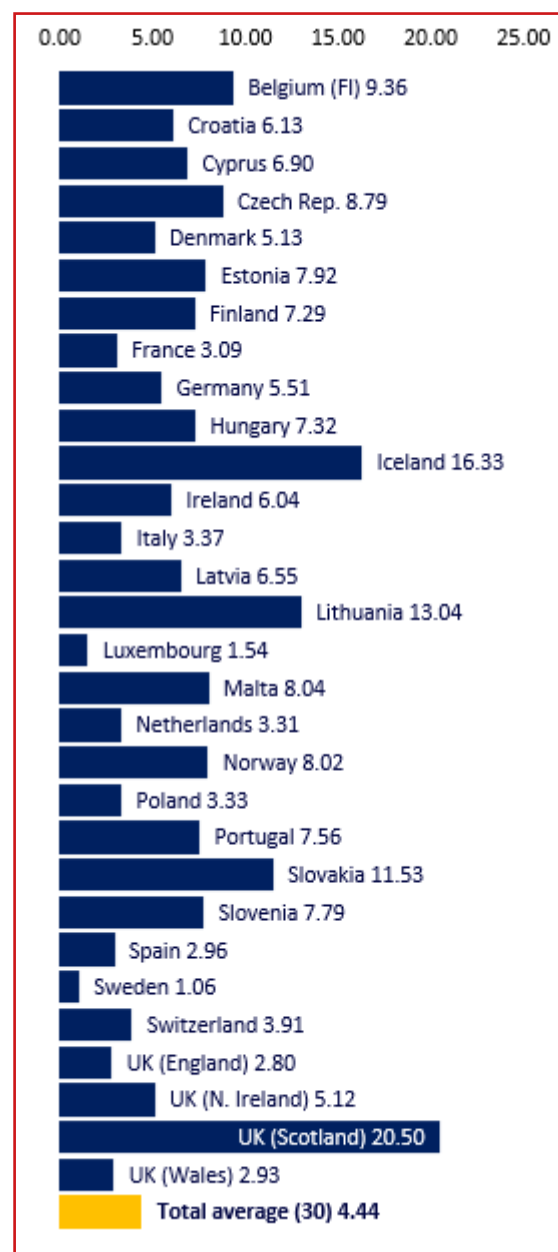
1.7 International SEN Prevalence Rates

Prevalence rates for SEN vary from country to country. This variation often occurs due to the differences in classification systems used internationally (Powell, 2010). At present, there is no universally accepted system of classification throughout the world. Generally, classification systems are implemented by countries for the distribution of additional educational resources to pupils with SEN (Norwich, 2008, p. 55). To unify the classification system across the world the Organisation for Economic Co-operation and Development (OECD) has generated three categories of SEN to enable cross country comparisons (for further details see OECD, 2005). Nevertheless, considerable differences in the rates generated within these categories still exist (Banks & McCoy, 2011; OECD, 2005; Powell, 2010). The primary categories of SEN used by countries in their classification systems include pupils who have vision and hearing impairments, emotional and behavioural difficulties, physical disabilities, speech and language impairments, multiple disabilities, moderate or severe GLD, and specific learning difficulties (Meijer, Soriano, & Watkins, 2003, p. 17).

As seen in Figure 1.2, there is a considerable variation in the statistics generated for Europe (European Agency for Special Needs and Inclusive Education (EASNIE), 2016). The data generated by the agency includes 30 European countries and shows that the percentage of pupils in formal education with SEN (see EASNIE, 2016 for classification details) ranges from 1.06% in Sweden to 20.50% in Scotland, United Kingdom (UK) (see Figure 1.2 for further details). It is important to evaluate the rates outlined in Figure 1.2 with caution, as some countries supply figures based on the number of pupils receiving additional teaching supports and others on the number of pupils with a diagnosis but not necessarily getting additional supports.

Figure 1.2 Percentage of pupils with an official decision of SEN, based on the enrolled school population (From EASNIE, 2016, p.21).

In the UK, during the academic school year 2017/2018 there were 2.9% (n=253,680) of pupils with a statement of need in England (Department of Education, United Kingdom (DEUK), 2018). For Wales, which has a slightly smaller population (N=3,099,000) than the RoI (N=4,780,000) it was found that 12% (n=104,957) of pupils had a statement of need for the school year 2014/2015 (Dauncey, 2016). Speech, language and communication needs were most prevalent (21.18%, n=4,619), ASD was second (19.48%, n=4,248), behavioural, emotional, and social difficulties was third (12.67%, n=2,763) and severe learning difficulties was fourth (10.50%, n=2,291). In Wales, only 1.4% of pupils with SEN were reported with dyslexia. When the distribution of SEN is analysed by age in England (DEUK, 2018) the prevalence of SEN increases with age. As pupils attending state funded primary, secondary, and special schools reach the age of 14 and 15 years old the rates stabilise. It has also been found that specific learning difficulties, such as, dyslexia are more prevalent in pupils attending post-primary school (26% of 15-year olds) than primary school (10.74% of 7-year olds). The number of pupils presenting with moderate learning difficulties and social, emotional, and mental health problems is also higher in post-primary school. In the UK, ASD is the most prevalent category of SEN for



children from 4-17 years of age, with children of 4 years of age having the highest prevalence rate within this cohort (DEUK, 2018). For the cohort of pupils diagnosed with speech, language and communication needs, this SEN is most frequently reported in younger children. Over half of 3 year olds (62.8%) reported to have a SEN were diagnosed with speech, language and communication needs, whilst this reduced to 14.5% at 10 years of age, and 8.4% by the age of 15.

1.8 SEN Prevalence: RoI & NI

Cosgrove et al. (2014) estimate a prevalence rate of 27.8% (n=2,381) for 9-year old pupils with SEN in primary schools. This estimate was generated through the analysis of data gathered for the Growing Up in Ireland (GUI) study. An earlier study, by Banks & McCoy (2011) generated a lower

prevalence rate of 25% also using data from the GUI study for 9-year-old pupils attending primary school (N=8,568). The data analysed, included teacher and parental reports and teacher ratings of pupils on the Strengths and Difficulties Questionnaire (Goodman, 1997). Within this study, it was estimated that 17% of primary pupils were in receipt of additional teaching support under the GAM. This figure was established through the analysis of statistical data provided by the DES and the National Council of Special Education (NCSE). Additionally, they estimated that 0.6% of children were attending special classes attached to mainstream schools and 1.4% were attending special schools (Cosgrove et al., 2014). For the academic year 2015/2016, there were 28,714 primary school pupils with SEN identified as receiving additional teaching supports (see NCSE, 2016). As shown in Table 1.1, the five most frequently reported sub-groups in receipt of this support were children with SSLD, ASD, emotional/behavioural disturbances (EBD), physical disabilities, and multiple disabilities. Additional supports for pupils with high incidence SEN conditions such as, borderline mild GLD, mild GLD, and specific learning difficulties were not provided by the NCSE during this time.

Table 1. 1:

Shiel, Gilleece, Clerkin, & Millar (2011), compared the number of pupils in IM (N=3,030) and English-medium schools (N=5,358) attending learning support in 2nd and 6th class. As shown in Figure 1.3, the same percentage of 2nd class pupils (16%) in both school types attended learning support for English. There was a slight difference between school types in the number of pupils from 2nd class receiving additional support in mathematics, with 8% of pupils in IM schools and 11% in English-medium schools. Whilst in 6th class in both school types, equal numbers of pupils (10%) were reported to be attending mathematics learning support. A marginally higher number of pupils (11%) were obtaining English literacy support in English-medium schools compared to those attending IM schools (10%). In terms pupils in IM schools receiving additional teaching

The breakdown of pupils diagnosed with SEN receiving additional supports from the National Council of Special Education (NCSE) for the academic year 2015/2016 adapted from Cosgrove et al. (2014).

Special Educational Need	Number of Pupils	Percentage
Specific Speech and Language Disorder (SSLD)	7,437	25.90%
Autism/Autism Spectrum Disorder (ASD)	6,487	22.59%
Emotional/Behavioural Disturbances (EBD)	5,074	17%
Physical Disabilities	4,504	15.68%
Multiple Disabilities	2,272	7.91%
Severe Emotional/ Behavioural Disturbance (SEBD)	812	2.82%
Hearing Impairment	802	2.79%
Moderate General Learning Disability (GLD)	599	2.08%
Visual Impairment	301	1.04%
Assessed Syndrome	197	0.68%
Down Syndrome	167	0.58%
Severe/Profound GLD	34	0.11%
Other	28	0.09%
Total	28,714	

support through the medium of Irish, it was found that only 10% of IM schools were providing support in this area in 2010 (COGG, 2010). Ó Duibhir et al. (2017) found that 47.1% of IM schools (N=70) in the RoI were providing literacy support in Irish. Whilst, in NI, a much higher percentage of schools (94.7%, N=20) were found to be providing this support to pupils (Ó Duibhir et al., 2017). When the

number of pupils receiving additional teaching support in Irish in DEIS schools in the RoI was investigated, it was found that only 2.3% of boys and 0.57% of girls from 3rd to 6th class were receiving this support (Ní Chlochasaigh, Ó Duibhir, & Shiel, 2018). In these DEIS schools it was found that there was an emphasis on undertaking English literacy and maths support with pupils. When reviewing these findings, it is important to note that a description of the methods used for selecting pupils for additional support in IM and English-medium schools is not provided. Hence, there could be a difference in the selection criteria used by school types. Also, findings state that often more pupils in the average range in rural schools are receiving additional support, than those in urban schools (Cosgrove et al., 2014)

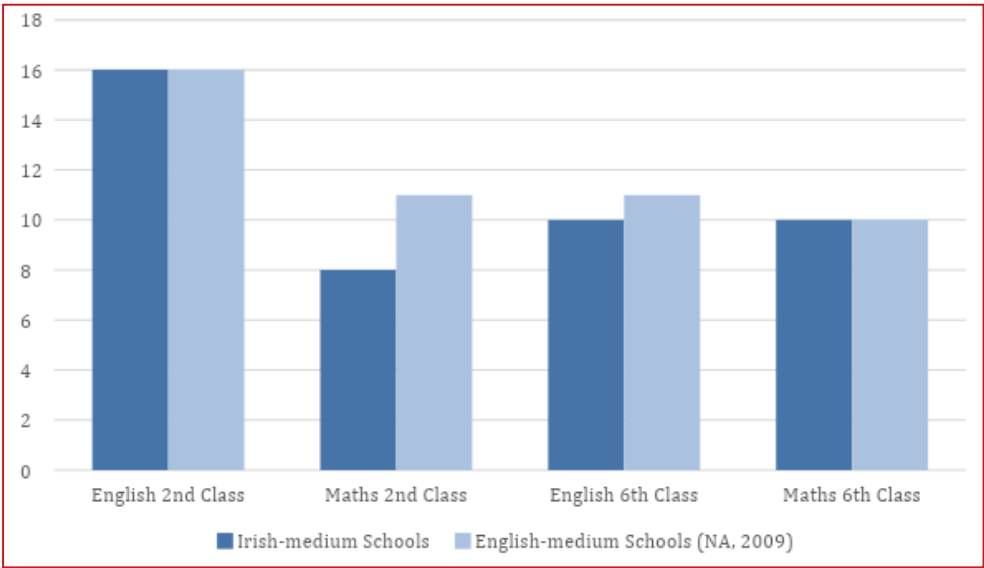


Figure 1.3 Comparison of the percentage of pupils attending learning support in IM and English-medium schools (Adapted from: Shiel et al., 2011, p. 32).

For the academic school year 2017/2018, 23% (n=79,167) of the school population in NI were reported with SEN. Of this cohort, 5.2% (n=17,837) of pupils had a statement of need and 17.9% were on stages one to four of the

Code of Practice (1998). The comparable figure for the school year 2015/2016 was 76,305, within this cohort 22.3% of pupils were identified with SEN. Of these 5% had a statement, with the remaining pupils being on stages one to four of the Code. The most frequently reported SEN were: cognitive and learning needs (59%), communication and interaction needs (16%), social, emotional, and behavioural (13%), medical conditions and/or syndromes (7%), sensory needs (2%), other needs (2%), physical needs (1%) (Northern Ireland Audit, 2017).

1.9 Conclusion: Outline of the Present Study

This chapter provided an outline of the aims and research questions of the present study. It also provided an overview of the rationale for this research and the context in which it was undertaken. Along with this, a brief description of the methodology used was given.

In Chapter 2, an overview is provided of the relevant literature surrounding the concepts of bilingualism, bilingualism for pupils with SEN, bilingual/immersion education, and the context of Irish immersion education in the RoI and NI. The challenges faced by bilingual children with SEN and those faced by schools educating these children through a L2 will be reviewed, along with the international practices recommended to overcome these challenges.

The methodology and epistemology of the study are outlined in Chapter 3. As mentioned previously, a sequential mixed methods approach was implemented in this study, and the rationale for the selection of this method is also given. An overview is provided as to how the methodologies used were piloted and implemented on a practical level. The ethical considerations of undertaking this research are discussed and the practices put in place to establish ethical consistency and compliance throughout the process are reviewed. Another aspect discussed in this chapter is the role of the researcher within the study.

In Chapter 4, the research findings of stage one (survey) are provided and analysed in relation to the literature reviewed in Chapter 2. Whilst Chapter 5 presents and analyses the data collected from the case studies conducted in stage two.

The findings of both stages of the research are triangulated in Chapter 6 and compared to the national and international literature reviewed. Following this, recommendations are made as to how the challenges faced by IM schools when educating pupils with SEN can be overcome using internationally recommended practices. Recommendations are made as to the additional supports required by pupils with SEN learning through Irish.

2.1 Introduction

This chapter provides an overview of the literature which is relevant to the research that was conducted in the present study. As the research relates to bilingualism and L2 acquisition for children with SEN, an overview is provided of these concepts for all children and those with ASD, dyslexia, and SSLD. The context of immersion education is presented along with an evaluation of its benefits, suitability for pupils with SEN, and the challenges encountered when educating pupils with SEN through a L2. The supports required to enable these pupils to access the curriculum are reviewed. IM education is evaluated in relation to: (i) exposure to the Irish language, (ii) learning outcomes for pupils, (iii) the home languages of pupils, and (iv) parental involvement. Inclusive education in these schools is assessed in terms of SEN prevalence, the practices in place to meet the needs of pupils, the challenges faced when educating pupils with SEN through Irish, and the additional supports required by these schools to help all pupils access the curriculum. Finally, as the present research includes pupil voice, the findings from previous studies which incorporate the voice of children with SEN are discussed.

2.2 Bilingualism

Bilingualism is the ability to speak and understand two languages (Paradis, Genesee, & Crago, 2011). As this research involves children with SEN, the definition of bilingualism by Grosjean (1992, p. 51) which refers to “the regular use of two (or more) languages” by those who “need and use two or more

languages in their everyday lives” has been adopted. This definition has been selected as it places an emphasis on the use of the languages, rather than the language proficiency of the children with SEN. This is important, as children with SEN may never acquire full language proficiency in any language (Kay-Raining Bird, Genesee, & Verhoeven, 2016).

Bilinguals can be classified within two categories based on the age at which they are first exposed to a L2. Those who receive relatively equal exposure to two languages from birth or before the age of 3 are known as simultaneous bilinguals. It is reported that this group can reach language developmental milestones in both languages at the same rate as monolinguals (Baker & Wright, 2017; David & Wei, 2008; De Houwer, 2009; Paradis et al, 2011). Sequential bilinguals are those who are exposed to a L2 after 3 years of age, when their first language (L1) has been established (Baker & Wright, 2017). It has been suggested that, fluent L2 basic interpersonal conversational skills in sequential bilinguals can be established after 2 years of consistent and intense exposure to the L2 (Cummins, 1979, 1983, 1984, 2000, 2008). Five or more years are required for L2 learners to develop adequate L2 language abilities to function effectively in academic environments, such as, in school (Cummins, 2008; Lindholm-Leary 2012). Cummins (2008) maintains within the theory of cognitive academic language proficiency that this period is required for pupils to be able to work at a comparable level to native L2 speakers in an academic environment. For sequential bilinguals it has been suggested that current exposure impacts significantly more on language dominance and expressive language in a L2, than the age at which the child was first exposed to the language (Ågren, Granfeldt, & Thomas, 2014; Bedore et al., 2012; Bedore, Pena, Griffin, & Hixon, 2016; Chondrogianni & Marinis, 2011; Cohen, 2016; Hammer et al., 2012). Hammer et al. (2012), found a correspondence between the vocabulary size of Spanish-English bilingual children (N=191) in each of their languages and the amount of exposure they received to each language using subtests of the Woodcock-Muñoz Language Survey-Revised. Similarly, Bedore et al. (2016) evaluated

the effects of current input/output English language exposure for sequential Spanish-English bilingual children. This study was a cross-sectional analysis of 1st grade (N=586) and 3rd grade pupils (N=298) with a varied amount of bilingual exposure. The methods employed within the study were parental and teacher reports of pupils' English and Spanish language use and standardised assessments of semantic and morph syntactic development in each language. The findings showed that current levels of L2 exposure had an impact on pupils' language development for children at 3rd grade in English and in both grades for Spanish. With greater amounts of exposure to the L2, language abilities increased. In a French immersion context, Cohen (2016) identified that there was a correlation between L2 language proficiency and current the level of exposure to the L2 (input/output) for 6-8-year-old pupils (N=38). Questionnaires were used to collect information on language exposure. Language proficiency was measured through bilingual assessment using the Peabody Picture Vocabulary Test and the student oral language observation matrix.

2.2.1 First Language Abilities (L1) & Second Language Acquisition.

It is suggested that the level of competence a child obtains in their L2, is based on their level of L1 proficiency (Cummins, 1979, 1994). Melby-Lervåg & Lervåg (2011) conducted a systematic meta-analysis of the cross linguistic transfer of oral language, decoding, phonological awareness, and reading comprehension skills from the L1 to L2. The comparison of research findings from studies (N=36) on the cross linguistic transfer of oral language skills from the L1 to L2 in children (N=2,755) aged 4 year 1 month to 13 years 6 months showed a reliable correlation. When the transfer of decoding skills was investigated (N=22 studies), it was found that the instructional language to which the child (N=2,013) was exposed to in school, and the closeness of the writing systems of the L1 and L2, impact on the transfer of skills. Higher correlations were found in studies where the children experienced a learning environment which included both languages rather than only the L2. The transfer of skills was also higher across alphabetic systems, rather than from an ideographic system to

alphabetic. When generalising and interpreting these results, it is important to recognise that the age range of children in the sample of studies reviewed, was mostly between 6-10 years old. Most of these studies (except four studies) investigated the transfer of L1 skills to English (L2).

2.2.2 Benefits of Bilingualism.

Bilingual learners display increased attention control, problem solving, and abstract/symbolic representational skills (Bialystok & Martin, 2004; Bialystok, Craik, & Luk, 2008; Baum & Titone, 2014; Carlson & Mettzooff, 2008; Costa & Sebastian, 2014; Garraffa, Beveridge, & Sorace, 2015). Bialystok & Craik (2010) found that bilingual children (N=26) solved tasks which required participants to attend to certain features, ignore other features, switch between elements, and hold a complex rule quicker than monolinguals (N=25). Other research has also shown that bilingual children (Martin-Rhee & Bialystok, 2008, N=17), young adults (Bialystok et al., 2008, N=24) and middle-aged/older adults (Bialystok & Martin, 2004, N=20) resolve problems with conflicting responses more easily and quickly in congruent and incongruent trials. Nevertheless, the small sample sizes of these studies limit the generalisability of findings. In a more recent study, the working memory performance of bilingual Turkish-Dutch children aged five and six (N=68) was compared to monolingual children (N=52) (Blom, Küntay, Messer, Verhagen, & Leseman, 2014). The assessments used were home language questionnaires, standardised assessments of Turkish/Dutch vocabulary, and standardised working memory tests (see Blom et al., 2014 for further details). Interestingly, the results of the study showed that at age 5 there was no difference between the groups. Nevertheless, at age 6, as they gained greater exposure to their L2 (Dutch), the bilingual cohort displayed advantages in tests on working memory. This finding reflects those of the study by Garraffa et al. (2015) who found that benefits in cognitive development and working memory were more evident over time in bilingual Sardinian children. Hence, similar to other research, it can be suggested that a certain level of bilingual proficiency is required by children to obtain these cognitive advantages

(Antoniou, Grohmann, Kambanaros, & Katsos, 2016; Carlson & Meltzoff, 2008; Bialystok & Barac, 2012; Pelham, & Abrams, 2014; Poarch & van Hell, 2012; Videsott, Della Rosa, Wiater, Franceschini, & Abutalebi, 2012)

More developed communication and social skills have been identified in bilinguals (Bialystok, Martin, & Viswanathan, 2005; Cummins 2000, 2002; Fan, Liberman, Keysar, & Kizzler, 2015; Garcia, 2009; Liberman, Woodward, Keysar, & Kinzler, 2017). Fan et al. (2015) studied the effect of exposure to multiple languages on the communication skills of children aged 4-6 years old (N=24 bilinguals, N=24 monolinguals, N=24 monolinguals exposed to multiple languages). The results of this study showed that those exposed to two languages dramatically outperformed monolinguals on a task where children were asked to interpret a speaker's intended meaning. In a study on 64 toddlers, aged 14 to 17 months old (N=32 bilingual, N=32 monolingual), who had to complete communication tasks it was found that the bilingual cohort (regardless of their level of exposure to the L2) performed better on a perspective taking procedure (see Liberman et al., 2017 for further details).

An increased sense of identity, culture, and community have been reported in bilinguals (Baker & Wright, 2017). Increased levels of self-esteem in these children are experienced due to positive feelings in these areas (Cummins 2000). It is thought that bilinguals have enhanced cultural awareness in both the culture of their L1 and L2 (Garcia, 2009). The benefit of cross-cultural competence has been evaluated in research (see Feinauer & Howard, 2014 for a review). Cross-cultural competence relates to the development of self-identity and positive attitudes towards yourself and others (Feinauer & Howard, 2014). Research has found that pupils in two-way (dual language) immersion programmes in the United States of America (USA) benefit from forming friendships with others from a range of diverse backgrounds (Bearse & de Jong, 2008; Block, 2011; de Jong & Bearse, 2011; Lindholm-Leary, 2011). Bearse & de Jong, (2008) conducted a qualitative study which incorporated 166 surveys and 24 focus group interviews with pupils across Grades 6-12 in two-way immersion

education. Findings showed that pupils experienced academic, linguistic, and cultural benefits.

2.2.3 The Disadvantages of Bilingualism.

Research has proposed that there are disadvantages of learning two languages for some individuals. These are thought to be caused by the lack of exposure to a language (L1/L2), the age of L2 acquisition, and the lexical conflict that occurs due to the ownership of two languages. Conflict is thought to arise as bilinguals experience more influences during lexical decision making (Bialystok, 2009; Randsell & Fischler, 1987). In this section, the proposed disadvantages in terms of verbal fluency and vocabulary development will be assessed, as the present study focuses on bilingual children with SEN who may experience language difficulties. On verbal fluency tasks, it has been found that bilinguals can be at a disadvantage compared to monolinguals (Bialystok et al., 2008; Ivanova & Costa, 2008; Kormi-Nouri, Moradi, Moradi, Akbari-Zardkhaneh, & Zahedian, 2012; Portocarrero, Burright, & Donovanick, 2007). For example, Bialystok et al. (2008) found that monolinguals (N=48) could name pictures more quickly than bilinguals (N=48) when asked to do so on a picture naming task. Similar findings were reported on semantic verbal fluency tasks, where participants were asked to name as many words in a semantic group, for example animals (Roselli et al., 2002). Kormi-Nouri et al., (2012) conducted a large study (N=1,600) on the effects of bilingualism on letter and category fluency tasks in three locations in Iran (see Kormi-Nouri et al., 2012 for further participant details). Results from the category fluency tasks showed that the monolingual cohort outperformed the bilingual cohort.

Research suggests that bilinguals have a smaller vocabulary in each of their languages (Barac & Bialystok, 2012; Bialystok, Luk, Peets, & Yang, 2010; Oller & Eiler, 2002; Portocarrero et al., 2007). This is thought to be attributed to the fact that bilinguals often receive less exposure in each language (Abutalebia & Green, 2007; Ben-Zeev, 1997; Michael & Gollan, 2005; Oller, Pearson, &

Cobo-Lewis, 2007). Those who receive higher levels of language exposure attain a larger vocabulary (David & Wei, 2008; Gathercole, 2002; Poulin-Dubois, Bialystok, Blaye, Polonia, & Yott, 2013). Reduced language input/output in both languages can negatively impact on word learning compared to those using only one language (Legacy, Zesiger, Friend, & Poulin-Dubois, 2018). It has been suggested that the total vocabulary of bilinguals (L1 vocab + L2 vocab) equals or is greater than the total vocabulary of monolinguals (Junker & Stockman, 2002; Oller et al., 2007; Poulin-Dubois et al., 2013). For example, in a study by Ollers & Eilers (2002), it was found that monolingual students aged 5-10 years old (N=248) outperformed their bilingual counterparts (N=704) in oral language ability, word comprehension, and word production. Bialystok & Feng (2009) recorded similar findings, where monolinguals (N=20) scored significantly higher on the Peabody Picture Vocabulary Test (a receptive vocabulary assessment) than bilinguals (N=20). Poulin-Dubois et al., (2013) studied the vocabulary development of bilingual toddlers (N=25) and monolingual toddlers (N=18) and found significant differences in the amount of words these groups had in their L1. The bilingual group had less words in their L1 vocabulary, but they had the same amount of words in total vocabulary within both of their languages. Thordardottir (2011) states that for bilingual education pupils to be comparable to their monolingual peers in their L2 vocabulary they need to be exposed to the L2 for between 40 - 60% of the waking day.

2.3 Autism Spectrum Disorder (ASD)

ASD is a continuum of developmental disorders that can range from mild to severe (Lauritsen, 2013). It is a heterogeneous group of neurodevelopmental disorders, which are complex, pervasive, and multifactorial (Jeste & Geschwind, 2014; Masi, DeMayo, Glozier, & Guastella, 2017). Those diagnosed with ASD display a diverse range of abilities in terms of adaptive function, cognitive and language abilities, and neurological co-morbidities (Jeste & Geschwind, 2014, p.1). For example, studies have shown that by adulthood almost a third (30%)

of those with a diagnosis will be non-verbal (Hus, Pickles, Cook, Risi, & Lord, 2007; Jeste & Geschwind, 2014) and the same amount will have a normal verbal IQ with deficits in the pragmatics of language (Anderson et al., 2007; Jeste & Geschwind, 2014). The ASD spectrum includes those with pervasive developmental disorders, Asperger's disorder, childhood disintegrative disorder, and pervasive neurodevelopmental disorders (see Lauritsen, 2013, for further details). Deficits and impairments in the social and communicative abilities of these children are a characteristic of this disorder, along with repetitive stereotypic behaviours and narrow restricted interests (American Psychiatric Association, 2013; Centre for Disease Control and Prevention (CDC), 2017). Some children are non-verbal and fail to develop any speech even into adulthood (Howlin, Savage, Moss, Tempier, & Rutter, 2014). Others experience a delay in receptive and expressive language (Mitchell et al., 2006). These language delays may be apparent through difficulties in using and interpreting language; pragmatics (Rice, Warren, Betz, 2005), expressions, metaphors (Happé, 1993), and conversational rules (Hampton, Rabagliati, Sorace, & Fletcher-Watson, 2017; Volden & Philips, 2010). Furthermore, they may find it difficult to develop relationships with others, including their siblings (Colle, Baron-Cohen, Wheelwright, & van der Lely, 2008). Some children with ASD display oppositional behaviour, which can be seen as being disobedient, hostile, or defiant (Mandy, Roughan, & Skuse, 2014).

In the USA, the Centre for Disease Control and Prevention (CDC, 2014) have established an overall prevalence rate of 14.7 per 1,000. This equates to 1 in 68 children, aged 8 years old having an ASD diagnosis. For Canada, a lower rate of 1 in 109 children, aged between 2 and 14 years of age has been proposed (Ouellette-Kuntz et al., 2014). In the RoI, a longitudinal study of pupils (N=5,457) in mainstream primary and special education schools generated a prevalence rate of 1% (N=63) for mainstream schools and 52% (N=36) for children attending special schools (Boilson, Staines Ramirez, Posada, & Sweeney, 2016). This estimate reflects previous research findings (under 1%, n=69) by Cosgrove et

al. (2014). Of this cohort, almost all children (N=63/69) were identified as having multiple SEN. Meanwhile, in NI, the Department of Health, Social Services, and Public Safety (2014), estimated that 2% of pupils (N=5,458) of compulsory school age (N=279,299) presented with ASD. The limitations of this figure are that it fails to represent approximately 170 children who are home-schooled and those without a diagnosis or those in the process of undertaking assessment.

2.3.1 Second Language (L2) Acquisition for Children with ASD.

Limited research findings suggest that bilingualism does not cause additional language delays or have a negative impact on L1 language development in children with ASD (Dai, Burke, Naigles, Eigsti, & Fein, 2018; Gonzalez-Barrero & Nadig, 2018; Hambly & Fombonne, 2014; Jegathessan, 2011; Kay-Raining Bird, Lamond, & Holden, 2012; Ohashi et al., 2012; Petersen, Marinova-Todd, & Mirenda, 2012; Reetzke, Zou, Sheng, & Katsos, 2015; Sen & Geetha, 2011; Valicenti-McDermott et al., 2013). No difference was found in the cognitive functioning, receptive language skills, expressive language skills, number of words, presence of word combinations, or the autistic features of simultaneous/sequential bilinguals and monolingual children with ASD (Hambly & Fombonne, 2012; Ohashi et al., 2012; Valicenti-McDermott et al., 2013). Furthermore, it has been suggested that these children reach early language milestones at the same rate as their monolingual counterparts (Hambly & Fombonne, 2012).

Petersen et al. (2012) established that 62% of simultaneous bilingual children (N=14) with ASD, aged between 38-76 months had the ability to speak words in a L2. Furthermore, the monolingual children with ASD (N=14) and the bilingual cohort scored equivalently on measures of language and vocabulary, when the total production vocabulary of bilinguals was considered. The total production vocabulary was greater in size for the bilingual cohort, than the single vocabulary of the monolingual cohort, when the non-verbal intelligence variable was controlled. These findings are consistent with those for bilingual children without language impairments from earlier research (Pearson, Fernandez, &

Oller, 1993). In the review of multidisciplinary evaluations undertaken on Spanish-English bilingual toddlers (N=40) with ASD and English monolinguals with ASD (N=40), the bilingual group scored higher in the area of social skills (see Valicenti-McDermott et al., 2013, for further details). These findings reflect those for all bilinguals, who have been found to outperform monolinguals in social skills (Comeau, Genesee, & Mendelson, 2007; Yow & Markman, 2011). Dai et al. (2018) compared 106 children with ASD or developmental delay in bilingual education with 282 monolingual children with the same conditions in relation to their nonverbal and verbal abilities. Findings showed that the bilingual group was not at a disadvantage due to their bilingualism, thus suggesting that bilingualism is attainable and suitable for children with these categories of SEN. A similar, more recent study analysed longitudinal data on language development in bilingual children with ASD (N=98) and also found no evidence to support the claims that bilingualism inhibits language development for these children (Zhou, Munson, Greenson, Hou, Rogers, & Estes, 2019). The assessment measures used were home language exposure questionnaires, the Vineland Adaptive Behaviour Scales, MacArthur Bates CDI, and the Mullen Scales of Early Learning. Findings showed that bilingual children with ASD could acquire and develop language abilities in two languages overtime. Nevertheless, it is important to consider the limitations of this exploratory study when interpreting the findings. The study was conducted using only English language assessments and parental reports. There was a lack of standardised testing to provide an objective overview.

It is important to interpret the research findings of all the above studies with caution, as these studies only incorporated preschool age children and no comparisons were made with bilingual children without SEN. Studies did not match their participants in terms of ethnicity or language exposure and each study had different definitions for bilingualism. All sample sizes were small and they predominantly came from middle to high socio-economic status, except for participants in the study by Valicenti-McDermott et al. (2013). A higher socio-economic status might mean that there is a greater possibility the participants

were identified with ASD earlier and received interventions earlier (Reetzke et al., 2015). For the case study research conducted, (Jegathessan, 2011; Kay-Raining Bird et al., 2012) all studies had a small sample, no quantitative measures were used to assess language development, and parental or researcher reports were used to establish language abilities.

2.3.2 Language Exposure & Bilingualism for Children with ASD.

Two studies found that current L2 exposure has a positive effect on L2 language development in bilingual children with ASD (Gonzalez-Barrero & Nadig, 2018; Hambly & Fombonne, 2014). In the most recent study by Gonzalez-Barrero & Nadig (2018) the development of vocabulary and morphological skills in school-aged children with ASD was assessed in relation to levels of L2 exposure. The study compared language development in 47 children without a diagnosis of ASD and 30 children with ASD using three standardised language tests. It was found that for both groups the amount of current language exposure predicts vocabulary acquisition (62% variance) and morphological skills (49% variance). The earlier study by Hambly & Fombonne (2014) examined predictors of language development in the L2 for children with ASD (N=33). Similarly, it was found that current L2 exposure predicts expressive L2 vocabulary (60% variance). Thus, the findings of these studies suggest that consistent L2 exposure is required by children with ASD for them to become bilingual.

2.3.3 The Perceived Benefits of Bilingualism for Children with ASD.

Research suggests that there are benefits of bilingualism for children with ASD, for example, in relation to: social and family involvement/inclusion, future employment, and cognitive/metalinguistic advantages (Beauchamp & MacLeod, 2017; Hampton et al., 2017; Kay-Raining Bird et al. 2012; Kohnert, 2013; Larocci, Hutchison, & O'Toole, 2017; Yu, 2013). Larocci et al., (2017) investigated the effects of L2 exposure on executive function and functional communication in bilingual children (aged 6-16 years) with ASD (N=39) compared to monolingual

children with ASD (N=52) using parental reports of language development. The results showed that L2 acquisition did not negatively affect the bilingual cohort as they performed as well as the monolingual children with ASD in assessment measures. However, a limitation of these findings is that they are based on parental report measures which can be subjective. Hampton et al. (2017) interviewed 17 parents of bilingual children with ASD, and 18 parents of bilingual children without ASD. It was established that both groups experienced several similar advantages of bilingualism. For both groups, bilingualism allowed children the opportunity for general intellectual development, to broaden their minds, see things from different perspectives, and it provided them with other ways of approaching things (Hampton et al., 2017, p. 436). Subsequently, the bilingual ASD cohort referenced several positive benefits of bilingualism specific to their group; it provided these children with added learning opportunities, developed their communication skills, and enhanced their relationship with family members.

2.3.4 Practical Constraints of Bilingualism for Children with ASD.

Parents have reported that raising children with ASD bilingually can be stressful (Giovagnoli et al., 2015). Bilingualism was often reported as difficult to achieve for children with ASD due to specific difficulties, such as, the need for routine (Hampton, Rabagliati, Sorace, & Fletcher-Watson, 2017; Yu, 2013, 2016). Many parents felt the need to 'keep things simple' (Hampton et al., p. 442). Some parents reported that bilingualism would be an added burden to their child's already limited cognitive reserves. The need and motivation for their child to be bilingual was overshadowed by other concerns and issues they faced relating to their child's ASD.

2.3.5 Parental Concerns: ASD.

Parents have expressed concerns about obtaining access to professional help or services for their bilingual child, their child's ability to learn two languages,

and that bilingualism could confuse their child and/or delay their language development (Beauchamp & MacLeod, 2017; Hampton et al., 2017; Ijalba, 2016; Jegathessan, 2011; Kay-Raining Bird et al., 2012; Uljarević, Katsos, Hudry, Gibson, 2016; Yu, 2013, 2016). For example, having no access to professional bilingual interventions or services was cited as their primary concern for parents (89%, n=18) in the study by Kay-Raining Bird et al. (2012). Whilst the fear of confusing a child through using two languages or thinking that learning two languages is too hard (78%), not being able to help their child learn through a L2 (22%), and having no support from family or friends if raising their child bilingually (11%), were also reported as causing anxiety and concern.

2.4 Specific Speech and Language Disorder (SSLD)

There are many different terms used to describe children who experience language and communication difficulties. For example, specific language impairment (SLI), specific speech and language impairment (SSLI), specific language disorder (SLD), specific speech and language disorder (SSLD), primary language impairment (PLI), developmental language delay (DLD), and language learning disability (LLD). It is important to recognise that even though there is a lack of agreement regarding the appropriate terminology and descriptive language used to define these difficulties in children, there is a consensus regarding the characteristics displayed (Irish Association of Speech and Language Therapists (IASLT), 2017, p. 13).

Within an Irish context, the Department of Education and Skills (RoI) use the term SSLD in circulars that outline the provision of additional support for children with speech and language difficulties (DES, 2005a; DES, 2007a). These children must meet a set criterion to attend a special class (see criteria outlined in DES, 2007a, Circular 0038/2007). When there is no place available in a special class it is recommended that additional teaching support should be provided for these children in a mainstream setting (DES, 2007a, Circular, 0038/2007; DES, 2017a, Circular 013/2017). In Northern Ireland (NI), the term speech and

language difficulties is used within the Code of Practice (DENI, 1998) for the allocation of additional educational support. Similar to the criteria for the RoI, children with speech and language difficulties in Northern Ireland must show a discrepancy between their cognitive abilities (intellectual ability, non-verbal ability) and their level of attainment on standardised and classroom-based assessments, to access additional support (DENI, 1998, A.28).

Children with a SSLD, can have difficulties with their receptive language skills, expressive language skills, or both. They exhibit language abilities that are below those for their age on standardised assessments in these areas (Paradis, 2010). These persistent and specific difficulties are not caused by an intellectual learning disabilities, motor problems producing speech, acquired neurological damage, hearing loss, emotional deprivation, nor ASD (IASLT, 2007; Leonard, 1998; Paradis, 2010; Rice, 2004). These children have average or above average intelligence (IQ scores of 85+), and can be divided into three heterogeneous groups (IASLT, 2017):

- (i) Children who have equal difficulty understanding and producing language,
- (ii) Children who have a considerable gap between their ability to understand language and produce it, and
- (iii) Children who have difficulties in one or more specific concept, e.g. morpho-syntax, vocabulary, phonology, pragmatics.

In a school context, children with this diagnosis may experience difficulties remembering words. They may also require more exposure to new vocabulary for word identification and comprehension (Leonard, 2014). Research has also found that children with this diagnosis learn fewer words than children without a diagnosis, they can have difficulty with word retrieval, and their short-term memory (Kambanaros, Michaelides, & Grohmann, 2017).

Recent research by Norbury et al. (2016), on children aged 4-5 from state-maintained reception classes in Surrey, England, estimate that two children in

each class of 30 pupils will experience a language disorder which will hinder their academic progress. Within the total population studied (N=7,267), 7.58% were diagnosed as having a language disorder of unknown origin, while 2.34% had a language impairment associated with intellectual disabilities or existing medical diagnoses. The figure for the group of children with a language disorder of unknown origin (7.58%), corresponds with an earlier longitudinal study in the USA (Tomblin, Records, Buckwalter, Zhang, Smith, & O'Brien, 1997). Of the English monolingual kindergarten children (N=7,218) aged between 5 to 6 years old, 7.4% presented with a SLI. In NI, the Royal College of Speech, and Language Therapists (2013) suggest that the prevalence rate is similar to that of Norbury et al. (2016) at 7.4%. They suggest that this means that there are approximately two to three children in every classroom with these difficulties. In the RoI, the Irish Association of Speech and Language Therapists (IASLT, 2017, p. 28) estimate a lower prevalence rate of 6% (N=70,000) for a population of 1.2 million Irish citizens up to 19 years of age. This estimation was established through the review of previous research on this topic (McLeod & McKinnon, 2007; Norbury et al., 2016; Tomblin et al., 1997) and available statistics (CSO, 2011). It is important to be cognisant of the fact that actual figures may be higher or lower than those quoted.

2.4.1 L2 Acquisition for Children with a SSLD.

There is a relationship between the L1 abilities of bilingual children with SLI and their L2 proficiency (Blom & Paradis, 2015; Fichman, & Altman, 2019; Verhoeven, Steenge, & van Balkom, 2012). Verhoeven et al. (2012) conducted a cross-sectional study of 6-11 year old Turkish/Dutch sequential bilinguals with SLI (N=75). All participants had been diagnosed by a multidisciplinary team and their non-verbal intelligence scores were in the normal ranges. On all assessment measures except for the articulation measure, all groups scored higher in their L1 (Turkish) assessments. As expected for the SLI group, their scores were lower than for those without this diagnosis of SLI. It was also concluded that bilingual children with SLI (aged 6 to 7) were behind in both Turkish and Dutch language

abilities in comparison to the group without a diagnosis. When a regression analysis was undertaken on the results of these assessment measures, and the factors of age, short-term memory, and non-verbal intelligence were controlled for, it was evident that the participants' language proficiency in Turkish (L1), predicted their level of Dutch (L2) proficiency. A limitation of this finding is that the research only focuses on the linguistic abilities of these children and fails to address the area of literacy.

2.4.2 Cross Linguistic Transfer of Skills.

Studies have been conducted on word translation equivalents (cognates) for bilingual children. These words overlap in meaning between two languages, "in semantic meaning and phonological form (e.g., telephone in English and teléfono in Spanish)" (Grasso, Peña, Bedore, Hixon, & Griffin, 2018, p.619). For bilingual children without a diagnosis of a SLI, it has been found that being able to identify cognates has been an advantage for English language learners (Dressler, Carlo, Snow, August, & White, 2011; Kelley & Kohnert, 2012; Pérez, Peña, & Bedore, 2010; Proctor & Mo, 2009). For bilingual children with a SLI, two studies have been conducted on the use of cognates in speech and language interventions (Grasso et al., 2018; Kambanaro et al., 2017). The study by Kambanaros et al. (2017) involved a multilingual (Greek, Bulgarian, English) 8-year-old child undertaking an intervention programme using only English cognates. Assessment post-intervention was conducted in Greek and Bulgarian, results showed a cross linguistic transfer of skills and an increase in the number of cognates identified in both languages. Grasso et al. (2018) conducted a larger scale study on Spanish bilingual children with SLI (N=117, age 5 years 4 months to 8 years 9 months) to assess whether they experienced this cognate advantage. Several standardised assessment measures were utilised as well as parent/teacher language questionnaires (see Grasso et al., 2018 for further details). The researchers found that cognates facilitate phonological cross linguistic transfer of skills and that, bilingual children with a SLI show an advantage in this area. However, recent studies have found that for English

language learners with a SLI, there is often a limited cross linguistic transfer of skills (Ebert, Kohnert, Pham, Rentmeester Disher, & Payesteh, 2014; Grasso, Peña, & Bedore, 2014; Paradis, 2016; Perozzi & Sanchez, 1992; Restrepo, Morgan, & Thompson, 2013; Simon-Cereijido, Gutiérrez-Clellen, & Sweet, 2013). The study by Ebert et al. (2014) investigated the cross linguistic transfer of skills in Spanish-English bilinguals (N=59) attending school with a primary language impairment. These pupils were divided into three treatment groups. One group received interventions in non-linguistic cognitive processing. The second group undertook interventions in English (L2) and bilingually in Spanish-English. The third group acted as a control group (deferred treatment). Results showed that treatment only in the L2 provided minimal benefits for these children due to low levels of cross-linguistic transfer.

2.4.3 Language Exposure for Children with a SSLD.

The limited research undertaken on simultaneous bilinguals with a SLI proposes that with extensive and consistent exposure to a L2, these children can obtain language abilities which are comparable or better than their monolingual peers with a SLI (Gutierrez-Clellen, Simon-Cereijido, & Wagner, 2008; Kay-Raining Bird et al., 2016; Korkman, Stenroos, Mickos, Westman, Ekholm, & Byring, 2012; Paradis, Crago, & Genesee, 2011; Paradis, Crago, Genesee, & Rice, 2003). Paradis et al. (2003) studied French-English simultaneous bilinguals with a SLI (N=8), English monolinguals with SLI (N=21), and French monolinguals with a SLI (N=10). The mean age of the participants studied was 83 months, and all participants were attending speech and language therapy for SLI (see Paradis et al., 2003, for selection criteria). Most of the bilingual cohort (5/8) did not have lower tense scores in one language. The tense making scores of the bilingual group in their non-dominant language were within the range of the monolingual group with a SLI. However, all scores were below the expected levels for age-matched children without a SLI. These findings suggest that the acquisition of two languages for the bilingual group did not cause them to develop different patterns in morpho-syntax language development. The later study by Korkman

et al. (2012) also found that bilingualism did not aggravate specific language problems in bilingual children aged 5 to 7 with language impairments (N=56). Language development in these children was compared to a control group of bilinguals without language problems (N=60). Assessment of expressive language, comprehension, repetition, and verbal memory was undertaken with participants. As is to be expected, the cohort with language difficulties, scored lower on all measures compared to cohort without these difficulties. Nevertheless, it is suggested that bilingualism may result in slower vocabulary acquisition in all children. However, the results suggest that bilingualism is a viable option for children with language difficulties.

When the sequential bilingual group with a SLI is compared to monolinguals with or without a SLI, their language impairments are identifiable regardless of the language (L1/L2) they are tested in, the language outcome measures used, and at which age they were tested (Blom & Paradis, 2013, 2015; Kay-Raining Bird et al., 2016; Paradis, Schneider & Duncan, 2013; Rezzonica et al., 2015; Verhoeven, Steenge, & van Balkom, 2011). Research findings suggest that even though sequential bilinguals with a SLI can acquire proficiency in a L2, it takes them a longer period to reach similar levels of L2 ability to their monolingual SLI peers speaking only the L2 (Verhoeven, Steenge, & van Weerdenberg, van Balkom, 2011; Verhoeven, Steenge, & van Balkom, 2012). Blom & Paradis (2015) undertook a study on whether the factors of age, L2 exposure, and the transfer of language skills from the L1 to the L2, impact on the L2 abilities of bilingual children with a SLI (normal range IQ). Results showed that for the bilingual group, they scored higher when they began learning the L2 after the age of 3 years and 10 months. This is thought to be because they would have a larger working memory after this age. Similar to the group without a SLI, the length of exposure they received in the L2 had a positive impact on their assessment scores. However, it is proposed that bilinguals with SLI need longer periods of exposure to reach higher levels of L2 proficiency. The group without a SLI performed better on assessments after 15 months' exposure, although

this improvement failed to occur in the bilingual SLI group until after 19 months exposure. These results indicate that bilinguals with a SLI make less efficient use of their L1 knowledge when learning a L2. When compared to their peers without a SLI, they need a longer period of exposure to the L2 to attain the same levels of proficiency.

Paradis et al. (2013), undertook a study on bilingual children with SEN (N=152) and bilingual children with language impairments (N=26) to determine differences in English language abilities between these two groups. Both groups were matched in terms of age and the amount of exposure they had received to English (mean:21 months). Results showed that children with a SLI who were learning English as an L2, had significantly lower scores on all the measures of English proficiency except for vocabulary, in comparison to the bilingual group without a SLI. This finding corresponds with those of other studies on preschool bilingual children with a SLI, who found that L2 English learners performed more poorly on English language proficiency tests (Cleave, Girolametto, Chen, & Johnson, 2010; Rezzonico et al., 2015). Research also suggests that it takes bilingual children with a SLI more than 3 years to 'catch up' with their monolingual peers (Blom & Paradis, 2013, 2015; Paradis, 2008, 2010). The research findings showed that the SLI group were acquiring the English language at a slower rate than their peers. Gibson, Pena, & Bedore (2018) conducted a longitudinal study of Spanish-English bilinguals. They found that a gap existed between receptive and expressive language in the L2 for bilingual kindergarten children with primary language impairments (N=30). However, this gap was reported to have dissipated for these children by 1st grade. This gap was not evident in the control group of bilingual children without language impairments at any time (N=12). Kay-Raining Bird et al. (2016) propose that poor L2 language skills are likely to be caused by lack of adequate, consistent exposure to the L2, hence it is the weaker language.

2.4.4 Language Interventions for Bilingual Children with a SSLD.

Early research into the most effective language of intervention for bilingual children with language impairments was of questionable quality due to small sample sizes (some studies involved single case studies) and weak forms of experimental controls (Holm & Dodd, 1999; Perozzi & Sanchez, 1992; Schoenbrodt, Kerins, & Gesell, 2003; Seung, Siddiqi, & Elder, 2006; Thordardottir, 2010; Thordardottir, Weismer, & Smith, 1997; Tsybina & Eriks-Brophy, 2010). However, more recently, high quality randomized control trials have been conducted on language interventions and their outcomes for bilingual children with a SLI (Ebert et al., 2014; Pham, Ebert, & Kohnert, 2015; Restrepo et al., 2013; Thordardottir, Cloutier, Ménard, Pelland-Blais, & Rvachew, 2015; Tsybina & Eriks Brophy, 2010). Research conducted in this area has focused primarily on sequential bilingual children, who receive language interventions in the majority language, which is their L2. No known studies have been conducted on language interventions in the minority (L1) language only. The results of these trials have shown that language interventions in the L2 majority language improved L2 proficiency but failed to provide positive outcomes in the untreated L1 (minority language) of bilingual children with a SLI.

Ebert et al. (2014) studied the impact of three treatment programmes on Spanish-English bilingual children (N=59) with primary or specific language impairments. For the group who undertook the monolingual intervention (English only), there was a statistically significant improvement in seven areas of language development. They made large improvements in English vocabulary, and medium improvements, in their overall English language skills/all non-linguistic cognitive skills (see Ebert et al., 2014, for further details). Whilst the bilingual group, made statistically significant improvements in nine measures, but experienced a decrease in their processing speed performance. This group made medium gains in English non-word reading, their overall English language skills, small-medium gains in expressive vocabulary (English-Spanish), and small gains overall in their Spanish skills. The positive benefits of bilingual language

interventions are reinforced by the findings of a quantitative systematic review of bilingual and home language interventions for young dual language learners (Durán, Hartzheim, Lund, Simonsmeier, & Kohlmeier, 2016). This review included 26 quantitative research studies published in peer-reviewed journals from 1991 – 2014 (see Duran et al., 2016 for further details). Findings indicate that interventions which were undertaken bilingually, or in the home language of the child (minority language, L1), promoted superior home language growth, whilst not impacting negatively on the participants' majority language development (L2). However, most of the effects on language development in the reviewed studies were small to medium in range.

2.4.5 The Long-term Outcomes of Dual Language Interventions.

The long-term outcomes of dual language interventions were assessed in several of the studies reviewed above (Simon-Cereijido & Gutiérrez-Clellen, 2014; Pham, Ebert, & Kohnert, 2015; Restrepo et al., 2013; Thordardottir et al., 2015; Tysbina & Eriks Brophy, 2010). In the longitudinal research by Simon-Cereijido & Gutiérrez-Clellen (2014), sequential Spanish-English bilingual preschool children with a language impairment (N=52), were compared to bilinguals without a language impairment (N=55) over the course of the year post-bilingual intervention. Results showed that the language gains of this programme (in both English and Spanish), were still evident for the bilingual intervention group, five months' post-intervention. However, it is thought that these continued gains in English may have been influenced by the participants' attendance in a bilingual preschool programme, in which children were exposed to English upon preschool entry. These results reflect those of Pham et al. (2015) who found that three months' post-intervention bilingual children with moderate or severe primary language impairments (N=48) who had undertaken bilingual (Spanish-English), monolingual (English only), or non-linguistic cognitive processing interventions had maintained or showed improvement in their linguistic abilities across both languages. These results reinforce the benefits of language development using focused language and cognitive processing skills interventions. Furthermore,

it recognises that bilingual interventions do not detract from English language development, when English is the majority language of the community.

A small body of research has shown that there are benefits of interventions using both languages of bilingual children with ASD (Dalmau et al., 2011; Seung et al., 2006; Vaughan, 2014). Seung et al. (2006) undertook a 24-month speech and language intervention with a bilingual (Korean/English) child with ASD. Initially the intervention was implemented in Korean, and then after 12 months English was introduced within the programme. For the final 6 months of the intervention English was the language used. The results of the case study showed that the child had made significant development in his expressive and receptive language in both Korean and English. Also, there was a cross linguistic transfer of skills evident from Korean to English. Nevertheless, a limitation of this study is the single case study design and the lack of an experimental control group.

2.4.6 Parent Implemented Home Language Interventions.

Research states that English language (L1) interventions implemented by parents at home can have a positive effect on bilingual children's oral language and literacy development (Adesope, Lavin, Thompson, & Ungerleider, 2011; Lonigan & Shanahan, 2010; Roberts & Kaise, 2011; Sénéchal & Young, 2008). These programmes have shown that children achieve higher literacy levels when their parent/guardian are shown how to tutor their child effectively. Through a systematic meta-analysis of 18 studies, Roberts & Kaiser (2011) found that educating parents and empowering them to implement programmes at home led to improved responsiveness, positive effects on expressive language, and an increase in the rate of communication in bilingual preschool children with and without a language impairment. Unfortunately, there is limited research available on language interventions which are undertaken at home in a language other than English (Ijalba, 2016). Most of the research conducted in this area is based on the effectiveness of home language interventions with Spanish-English

bilinguals. There is a need for further research in this area using languages other than Spanish. Nevertheless, the findings of studies have shown that there are benefits of parental home language interventions for bilingual children with and without a language disorder (Ijalba, 2016; Thordardottir et al., 2015). For Hmong-Spanish speaking preschool children without language impairments, it was found that vocabulary learned in the L1 facilitated vocabulary acquisition in the L2 (Roberts, 2008). For Spanish-English bilingual children with language impairments (N=24), literacy benefits were found when mothers implemented home language and literacy activities (Spanish), based on interactive picture books. Parents of the intervention group (N=12, mean age = 43 months) undertook six parent education sessions before commencing language activities based on the books. Education sessions focused on language development milestones, the importance of early literacy, and extending L1 communication at home. Children in the intervention group made positive vocabulary gains in both the L1 and L2.

Shared reading programmes are valuable interventions which can be undertaken in a child's home language, their L2, or in both their home language and L2 (Barnett, Yarosz, Thomas, Jung, & Blanco, 2007; Collins, 2010; Durán, Roseth, Hoffman, & Robertshaw, 2013; Durán et al., 2016; Gesell et al., 2012; Hammer & Sawyer, 2016; Justice, Skibbe, McGinty, Piasta, & Petrill, 2011; Lim, O'Reilly, Sigafos, & Lancioni, 2018; Restrepo, Morgan, & Thompson, 2013). Research suggests that there are benefits for these interventions regardless of the language used by parents (Farver et al., 2009; Fitton, McIlraith, & Wood, 2018). Fitton et al. (2018, p. 735) conducted a meta-analysis of 54 articles and found that shared reading programmes have a positive effect on English language learners in terms of language and literacy development with "differences in the effectiveness of shared reading by the language of reading, indicating that bilingual or L1-only reading yielded the same effects as English-only reading." Lim et al. (2018) recommend that parents should be supported in their use of minority language interventions.

2.5 Dyslexia

Dyslexia is a specific learning difficulty in which children and adults experience difficulties in reading, writing, and spelling even though they have had the opportunity to access appropriate teaching and learning (Dyslexia Association of Ireland, 2017). Children with dyslexia experience cognitive difficulties in the areas of phonological processing which is of importance for those learning how to read due to the grapheme – phoneme alphabetic correspondence (Snowling, 2000). Retrieving information from their working memory and the ability to retrieve information from their long-term memory at speed can be a difficulty for dyslexics which ranges from mild to severe (Dyslexia Association of Ireland, 2017). They may have difficulty remembering sequences of information and new vocabulary presented aloud (Snowling, 2000). They may experience difficulties in numeracy and have co-morbid conditions such as Attention Deficit Disorder (ADD). In NI, children with dyslexia are defined within the Code of Practice (DENI, 1998, p. 71) under the category 'specific learning difficulties', as those with average or above average levels of intellectual ability, with impairments in reading, writing, spelling, and numeracy.

The American Psychiatry Association (APA, 2000) state that dyslexia is one of the most common childhood conditions and that it affects approximately 5% of the population. In the UK, it is proposed that 1 in 10 people have dyslexia, and that 1 in 5 of these will leave primary school with below the national expected levels in reading, writing, and mathematics (Dyslexia Action UK, 2017). In 2001, the Task Force on Dyslexia (DES, 2001) estimated that 8% of pupils presented with this learning difficulty. The National Council for Special Education (NCSE, 2006a), estimate that additional support services are provided to 6% of the school going population with specific learning difficulties in the RoI (N=190,303). However, a lower rate of 4.2% was generated by Cosgrove et al. (2014) in their analysis of the 9-year-old GUI cohort (N=8,568).

2.5.1 Orthography of Languages.

The orthography of a language relates to the association between the written symbols of a language (graphemes) and the significant spoken sounds of that language (phonemes). Language transparency and the ease at which words can be decoded is known as “the relationship between the written symbol of the script and the associated sound in speech” (Smythe, Everatt, & Salter, 2004, p. 1). Languages which use alphabetic writing systems have a high degree of grapheme-phoneme correspondence (transparency) and are described as having regular spelling. Research findings suggest that languages which have a high level of transparency are easier to learn to read in compared to those with a deeper orthography (Goswami, 2002; Seymour, Mikko, & Erskine, 2003). Research has shown that it can take longer for monolingual children to learn to read in a deep orthography and that this also has the potential to intensify reading difficulties for these children (Lallier, Valdois, Lassus-Sangosse, Prado, & Kandel, 2014; Landerl et al, 2013; Schmalz, Marinus, Coltheart, & Castles, 2015). For example, in a study on French-Spanish bilingual children with (N=9) and without dyslexia (N=9) it was found that dyslexic children were more accurate in reading Spanish (shallow orthography) than French (deep orthography) (Lallier et al., 2014). Furthermore, the reading deficits that they experienced were more pronounced in French than in Spanish.

As this study includes children attending IM schools from a community where English is the majority language, the orthography of both Irish and English will be reviewed. The English language has an opaque (deep) orthography even though it uses a 26-letter alphabetic writing system (Helland & Kaasa, 2005). This is because there are multiple ways to pronounce most phonemes and most letters (graphemes) have multiple pronunciations depending on their position in the word and the context in which the word is being used (Smythe et al., 2004). Early research on the orthography of English suggests that there are 41 phonemes which can be written in 561 different ways (Dewey, 1971). When compared to English, the Irish language orthography is reasonably regular and

transparent (Hickey, 2005). It contains 18 letters of the Latin alphabet, of which five are vowels and 13 are consonants. In total, the alphabet represents 50 basic sounds. Each vowel can either be short or long, which means that each vowel has two sounds and there are ten vowel sounds in total (Hickey & Stenson, 2011). Often words borrowed or directly translated from other languages contain letters from the English alphabet.

2.5.2 Dyslexic Children & the Bilingual Cross Linguistic Transfer of Skills.

Research on the cross linguistic transfer of skills in bilingual children with dyslexia shows that there is a possibility that these children can struggle to acquire certain language skills in all of their languages (Bekebrede, van der Leij, & Share, 2009; Bonifacci, Canducci, Gravagna, & Palladino, 2107; Chung & Ho, 2010; Cline, 2000; Deacon, Chen, Luo, & Ramirez, 2013; Gottardo, Yan, Siegel, & Wade-Woolley, 2001; Ho & Fung, 2005; Lallier et al., 2014; Lallier, & Carreiras, 2018; McBride-Chang, Liu, Wong, Wong, & Shu, 2011; Palladino, Bellagamba, Ferrari, & Cornoldi, 2013; Palladino, Cismondo, Ferrari, Ballagamba, & Cornoldi, 2016; van der Leij, Bekebrede, & Kotterink, 2010).

Studies were conducted on children with Dutch (van de Leij & Morfidi, 2006), Chinese (Chung & Ho, 2010; Hong & Fu, 2005), Italian (Bonifacci et al., 2017; Palladino et al., 2013, 2016), and Norwegian (Helland & Kaasa, 2005) as their L1 and English as their L2. The findings of these studies show that children with reading impairments in their L1 experience the same level of reading impairment in their L2. Bonifacci et al. (2017), compared Italian dyslexic children (N=19) learning English as an L2 to Italian bilinguals without dyslexia (N=19), and Italian monolinguals without dyslexia (N=76) in English writing and comprehension tests. All groups were matched for age, gender and all had an average IQ. Results showed that 70% of the dyslexic cohort failed at reading words in English, whilst less than 50% failed at reading non-words. Within writing tasks, 80% of this group were at borderline/below average level.

Three studies have examined the cross-linguistic transfer of skills of Chinese dyslexics learning English as a L2 (Chung & Ho, 2010; Ho & Fung, 2005; McBride-Chang et al., 2012) and three studies have assessed the transfer of skills from Italian to English (Bonifacci et al., 2017; Palladino et al., 2013, 2016). All studies have found that dyslexic children learning English as a L2 encounter reading difficulties regardless of the orthography of their L1. Furthermore, findings suggest that the severity of their reading difficulty in their L1 strongly corresponds with the severity of reading difficulties the child will experience when reading in English (L2). The findings of studies on the cross-linguistic transfer of skills of Italians with dyslexia learning English as a L2 suggest, that a reading impairment should appear in both languages, and that insufficient exposure may be the cause if children encounter reading difficulties in their L2, but not L1 (Bonifacci et al., 2017; Palladino et al., 2013, 2016).

Studies on spelling (Hellen & Kaasa, 2005; Palladino et al., 2013, 2016), have established that spelling and writing tasks in a L2 might present as a challenge for children with dyslexia. However, in the studies by Palladino et al. (2013, 2016), even though the dyslexic groups (2013, N= 23; 2016, N=13) performed more poorly on spelling and written tasks, they were as accurate as children without dyslexia when reading English pseudo words, and there were only marginal differences between the two groups in favour of children without dyslexia in non-word reading speed. This proposes that it may be easier for children to learn a L2 with an opaque orthography if their L1 has a transparent orthography. This would allow for the transfer of phonological rules to occur more freely. As with all research, the above studies have their limitations, which need to be considered when interpreting the results and generalising the findings. All the studies had a small sample size, which unfortunately is the nature of research in this area. One approach suggested to help these dyslexic children acquire a L2 is for them to strengthen their phonological understanding in their mother tongue prior to commencing reading and writing in their L2 (Nijakowska, 2010).

2.6 Immersion Education

There are many forms of bilingual education, which can be defined as either 'weak' or 'strong' (see Baker & Wright, 2017, for further information on bilingual education programmes). Immersion education programmes offer a 'strong' form of bilingual education. The aim of this form of education is for pupils to gain proficiency in the national or heritage language of a country, at no cost to their L1 (Baker & Wright, 2017; Bialystok, 2016; Cummins, 2009). Pupils "are 'immersed' in a second language instructional environment.....aimed at bilingual development" (Cummins, 2009, p. 161-162), while the curriculum remains that of the local community. Schools offer additive bilingualism. It is suggested that pupils enrol in these schools with similar limited levels of L2 proficiency and that their exposure to the L2 mostly occurs in the classroom (Swain & Lapkin, 2002).

Limited research exists as to why parents choose to enrol their child in one-way immersion education programmes. Wesley & Baig (2012, p.321) studied the primary reasons that parents (N=131) enrolled their children in immersion education. Participants spoke about how their personal experiences, social networks, 'love of languages,' and the positive experiences of others influenced their decision to send their child to an immersion school. Furthermore, this cohort of parents spoke about the fact that they regretted not having the opportunity to attend an immersion school or learn a L2 proficiently when they were younger. The learning characteristics of their child (15%) was also a motivating factor, with these parents stating that their child was high achieving and they felt that their child needed a challenge. Other factors listed in the study were: language learning (bilingualism, 40%), global and cultural awareness (23%), aspects of school unrelated to immersion (22%), and future opportunities for their child (21%). These findings correspond with other research in this area (Dorner, 2010, 2012; Giacchino-Baker & Piller, 2006; Sheldon, 2002). In the RoI, limited research shows that these factors also motivate parents to choose IM education for their children. Figure 2.1 shows a comparison of findings from

studies by Ní Thuairisg & Ó Duibhir (2016) who studied why parents chose IM primary education for their child and Mhic Mhathúna & Nic Fhionnlaíoch (2018) who studied the reasons why IM preschools were chosen by parents for their children. In both studies most parents (77%, 80%) wanted their child to have Irish. Over half of parents (54%) in the study by Ní Thuairisg & Ó Duibhir (2016) and almost three quarters (73%) in the study by Mhic Mhathúna & Nic Fhionnlaíoch (2018) had an interest in Irish that influenced their decision. Whilst equal amounts of parents in both studies (62%) cited bilingualism as a reason. The school's positive reputation was a factor listed in both studies.

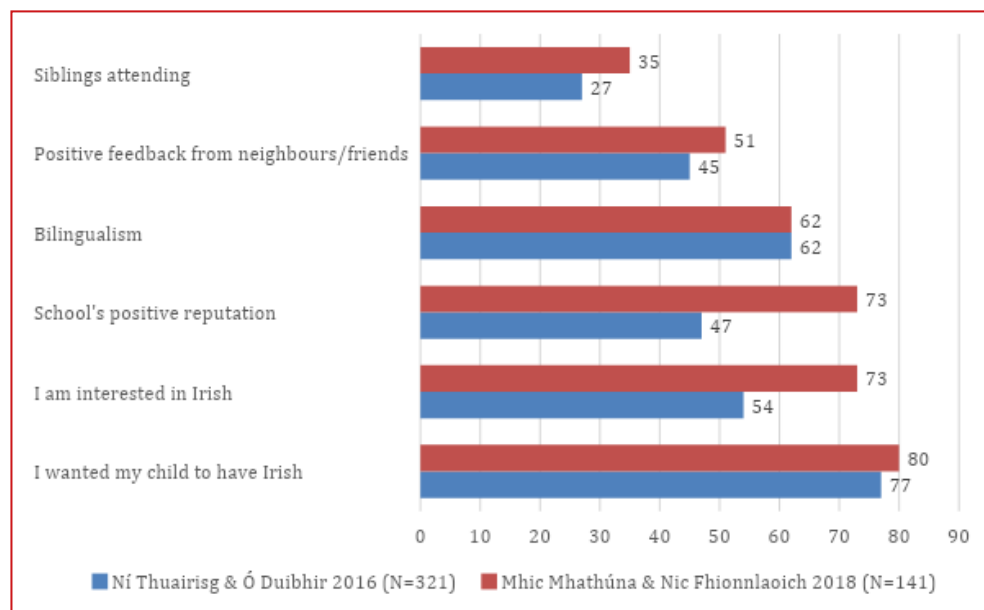


Figure 2. 1 Comparison of the findings of studies by Ní Thuairisg & Ó Duibhir (2016) and Mhic Mhathúna & Nic Fhionnlaíoch (2018) on the reasons why parents choose IM education for their child.

2.7 Outcomes of Immersion Education

Majority language children (L1) attending minority language (L2) immersion education programmes can gain comparable levels of L1 attainment to those

attending mainstream monolingual schools. Initially these children often score lower than their monolingual peers on assessments in L1 reading and writing, even though they develop comparable levels of L1 speaking and comprehension (Bergström, Klatte, Steinbrink, & Lachmann, 2016; Bialystok, Peets, & Moreno, 2012; Bialystok, Peets, & Moreno, 2014; Bialystok et al., 2010; May, Hill, & Tiakiwai, 2009). Studies have been undertaken in relation to the academic achievement of pupils in immersion programmes (Gort, 2006; Howard, Christian, & Genesee, 2004; Lazuruk, 2007; Lindholm-Leary & Genesee, 2014; Marian, Shook, & Schroeder, 2013; Umansky & Reardon, 2014). In an analysis of children from a French immersion programme in Grade 2 (N=50, mean age 7.7 years) and Grade 5 (N=33, mean age, 10.6 years), Bialystok et al., (2012) found that the French (L2) vocabulary of these children failed to develop as quickly as their English vocabulary (L1). Bialystok et al. (2014) compared the scores of a French immersion education cohort (N=68) on English standardised tests, to those of children attending mainstream English monolingual schools (N=56). The results of this comparison showed that by Grade 5, the immersion cohort, were more accurate at detecting grammatical errors in English (87%), than the monolingual group (78%). Also, the findings suggest that the immersion cohort experienced an accelerated effect on their English language vocabulary over the course of the study, compared to the monolinguals. It was also found that they experienced a greater increase in their English letter fluency than the control group. Overall the findings of this study showed that in the long term, there is no linguistic disadvantage of immersion education for pupils.

Within an Irish immersion school context, Parsons & Lyddy (2016) compared pupils' Irish and English reading development in four schools where children learned to read in Irish first, or English first. Findings showed that pupils were not at a disadvantage if they learned to read in Irish first, however, there was an initial 'settling in' period required before they reached the same academic level as those learning to read in English first. Shiel et al. (2011) utilised data from the 2009 National Assessment of pupils in English and mathematics to

compare pupils from 2nd and 6th class in IM schools (N=1,694) with those in the same classes in English-medium schools (N=6,694). Findings of this research revealed that IM pupils performed better than their English-medium counterparts on English and mathematics standardised assessments. However, when the SES factors were taken into consideration during analysis, it was found that both cohorts scored equivalently on English language assessments, and pupils in 6th class in IM schools scored lower in mathematics. The outcomes of IM education are discussed in further detail later in this chapter.

Similar results have been obtained for Japanese-English immersion programs (Bostwick, 2001), Russian-Estonian immersion programs (Mehisto & Asser, 2007), and Swedish-Finnish programmes (Björklund & Mård-Miettinen, 2011). Pupils (N=124) enrolled in a Mandarin immersion programme in Grades 3, 4, and 5, outperformed their monolingual control group in the area of English (Padilla, Fan, Xu, & Silva, 2013). A larger study was conducted in the USA, on the effects of dual language programmes in relation to academic achievement (Steele et al., 2017). Pupils (N=1,625) from seven schools were tracked each autumn from 2004-2010. Their achievement in English literacy, mathematics, and science were monitored using the results of standardised assessments. When the results from the immersion cohort were compared to those in monolingual schools, it was found that the immersion pupils outperformed their monolingual peers “in reading by about seven months of learning in Grade 5 and nine months of learning in Grade 8” (Steele et al., 2017, p. 302). Furthermore, results showed no statistically significant difference between both groups in mathematics and science assessments. For other subjects, such as, history, geography etc., it has also been found that those attending immersion schools can reach comparable levels as those attending mainstream monolingual schools (Essama & Hanson, 2007; Genesee, 2004; Genesee & Lindholm-Leary, 2013; Lindholm-Leary, 2001; Lindholm-Leary & Howard, 2008).

Research has found that bilingual education, such as immersion education, can facilitate the acquisition of a third language (L3) for pupils due to a cross-

linguistic transfer of skills (Bild & Swain, 1989; Brohy, 2001; Dillon, 2009; Jaspaert & Lemmens, 1990; Sanz, 2000, 2007). Early studies on immigrant bilinguals in Canada and Brussels have shown that individuals achieved higher scores on their L3 assessments than monolinguals learning these languages as their L2 (Bild & Swain, 1989; Jaspaert & Lemmens, 1990). Third language acquisition has also been studied in bilingual schools in Spain (Cenoz & Valencia, 1994; Lasagabaster, 2000; Safont, 2005; Sanz, 2000). The results of all these studies showed that the bilingual cohort outperformed the monolingual cohort when learning English as a L3. The areas of English language development assessed by these studies were oral and written language (Cenoz & Valencia, 1994; Lasagabaster, 2000, Sanz, 2000) and the acquisition of English language pragmatics (Safont, 2005). Within an Irish context, Dillon (2009) used a mixed methods research approach to investigate whether pupils in IM schools (N=92) found it easier to learn German as a L3, than those attending monolingual English schools (N=68). The findings showed that those attending IM schools reported that it was easier to learn German due to their prior linguistic knowledge in Irish. The findings of these studies support the theory that learning a L3 is easier when bilingual.

2.8 The Outcomes of Immersion Education for Pupils with SEN

Studies have been conducted on the suitability of immersion education for pupils with low intellectual and academic ability (Bruck, 1985a, 1985b; Genesee, 1976; Myers, 2009), poor L1 skills (Bruck, 1978; 1982), and reading difficulties (Erdos, Genesee, Savage, & Haigh, 2014; Thomas, Collier, & Collier, 2011). There have been more recent publications synthesizing the findings of this research (Genesee, 2007, 2015b; Genesee & Fortune, 2014). Within this section of the literature, findings from the original studies will be discussed on the suitability of immersion education for pupils with SEN.

Genesee (1976) systematically examined the language and academic performance of children in French immersion schools with low intellectual

and academic ability. As shown in Table 2.1, pupils in early full immersion kindergarten programmes and pupils in late immersion Grade 7 programmes were divided into 3 groups based on their IQ results on a standardised IQ test, (i) above average (IQ, 115+), (ii) average ability (IQ, 85-115), and (iii) below average (IQ below 85). Children in the below average group were found to achieve the same level of academic achievement in their L1 as their monolingually educated peers. This group of students scored significantly higher than their monolingual peers in all measures conducted in the L2. Subsequently, it can be surmised that this group were at no disadvantage in terms of academic achievement in their L1 and that immersion education provided them with the opportunity to acquire proficiency in an additional language.

Table 2. 1 The participants in Genesee’s 1976 study (from Genesee, 1976, p.270).

		TABLE 1 Summary of sample sizes and IQ scores							
		GRADE 4			GRADE 7			GRADE 11	
		Above Average	Average	Below Average	Above Average	Average	Below Average	Above Average	Average
EXPTAL 1	Sample size:	25	18	11	18	19	20	28	29
	IQ:	127.32	108.22	90.45	124.25	105.59	86.10	125.19	109.09
EXPTAL 2	Sample size:	NOT APPLICABLE			20	18	20	26	23
	IQ:	NOT APPLICABLE			122.70	103.02	87.26	124.98	106.00
FSL	Sample size:	23	24	23	16	17	18	24	25
	IQ:	120.30	106.38	90.35	121.30	104.87	85.44	124.52	106.60

A later study by Myers (2009) investigated the performance of Spanish-English bilinguals with a diagnosis of a learning difficulty, developmental delay, emotional disturbance, and other health impairments in 50:50 two-way immersion programmes in the USA. Pupils were enrolled in Grades 3,4, or 5 of these programmes. The assessment measures used in the study were criterion-

and norm-referenced tests of reading, listening comprehension, writing, spelling, mathematics, science, and social science through English. The results of this study showed that these pupils performed as well as their monolingually educated peers with the same condition on academic tests. Furthermore, they also performed better in Spanish language measures than these peers.

Research in relation to the suitability of immersion education for children with poor first language skills is also very limited (Bruck, 1978; 1982). Bruck (1978) investigated the L1 and L2 language skills, cognitive development, and school achievement of French immersion students with language impairments from Kindergarten to Grade 3 in Canada. By Grade 3, they scored comparably to their monolingual peers with the same difficulties on the assessments undertaken in their L1, cognition, and school achievement. Additionally, they had higher levels of L2 proficiency than the monolingual group who received only conventional L2 instruction.

Similarly, the limited research available on the suitability of immersion education for children with reading difficulties suggests that bilingual pupils with reading difficulties can perform as well as their monolingual peers in reading assessments (Erdos et al., 2014; Genesee & Geva, 2006; Thomas et al., 2011). Thomas et al. (2011) undertook a study on the reading and mathematical achievements of 86 pupils with SEN who were accessing additional learning support in six, immersion schools in North Carolina, USA (language of school instruction, 90% English and 10% Spanish). Almost all students (90%) had specific learning disabilities/specific language impairments. These pupils were compared to children presenting with the same difficulties attending monolingual schools using criterion referenced, end of year state assessments. Scores showed that they performed better than their peers attending monolingual schools in the areas of reading and maths. A limitation of this study is the small sample size used. Nevertheless, the comparison of assessment results proposes that children with SEN can benefit from immersion education.

2.9 The Challenges of Bilingual Education for Children with SEN

Within this section of the literature review the challenges of bilingual education for pupils with SEN, experienced internationally in terms of: (i) parental involvement, (ii) accessing bilingual services, (iii) professional development for teachers (iv) monolingual assessment, (v) professional advice from external professionals regarding the suitability of immersion education for pupils with SEN, and (vi) pupils with SEN transferring from immersion education are reviewed.

2.9.1 Parental Involvement.

Much international research has been conducted on the benefits of parental involvement within a child's education. Studies have shown that parental involvement can positively influence: a child's academic achievement (Castro, Expósito-Casas, López-Martín, Lizasoain, Navarro-Asencio, & Gaviria, 2015; Fan & Chen, 2001, Wang & Sheikh-Khalil, 2014; Wilder, 2014; Wong et al., 2018), behaviour (Wong et al., 2018), and school engagement (Bempechat & Shernoff, 2012; Ladd & Dinella, 2009). For example, in a longitudinal study of 507, Grade 3 primary school pupils in Hong Kong, China, it was found that home-based parental involvement had a positive impact on children's language proficiency, psycho-social wellbeing, and school engagement (Wong et al., 2018). There has been little significant research undertaken internationally on the outcomes of parental involvement for pupils in immersion education. Parental involvement in dual language programmes has been researched in relation to the parental motivations for selecting this form of education for their child (Baig, 2011, Lopez, 2013; Wesley, 2009; Wesley & Baig, 2012; Whiting & Feinauer, 2011), parental satisfaction (Olivos, & Lucero, 2018; Parkes & Tenley, 2011), and parental attitudes and beliefs surrounding these programmes (Giachinno-Baken & Piller, 2006; Olivos & Lucero, 2018; Parkes & Tenley, 2011; Ramos, 2007). Research on parental involvement in immersion education programmes, identified that low parental proficiency in the school's language of instruction is a barrier to their participation (Tinkler, 2002; Turney & Kao, 2009). In the Rol and NI it was

also found that parents find it difficult to be involved in their child's IM education due to lack of proficiency in Irish (Kavanagh, 2013; Kavanagh & Hickey, 2013; Ní Chinnéide, 2009; Ó Duibhir, Nig Uidhir, Ó Cathalláin, Ní Thuairisg, & Cosgrove, 2015). This was referenced in particular by parents of children with SEN, who felt that they were unable to help their child academically and this caused them anxiety and concern (Kavanagh, 2013; Ó Duibhir et al., 2015).

2.9.2 Accessing Bilingual Services for Children with SEN.

De Valenzuela et al. (2016) conducted an international study of service providers to bilingual children with SEN in six locations within four countries (Canada, USA, UK, and Netherlands). The findings of the 79 semi-structured interviews with educational professionals (N=48 bilingual/multilingual service providers, N=33 use more than one language in the workplace) on the inclusion/exclusion of children with developmental delays from bilingual services showed that the primary barriers for accessing bilingual services were: time constraints, scheduling conflicts, and limited service availability (de Valenzuela et al., 2016). Subsequently, the findings of the study recommend that there is a need for the greater availability of bilingual language programmes. These findings correspond with those of previous research which have shown that bilingual children are predominantly only treated in one language by speech and language therapists (Jordan, 2008; Pham, Kohnert, & Mann, 2011; Williams & McLeod, 2012). In a study of speech and language therapists in 13 countries, Jordan (2008) found that 87% of bilingual children (N=157) were receiving monolingual language treatments. The primary reasons cited by practitioners in this study (N=99) was that 74% were monolingual and only provided monolingual services, and they felt under increased pressure to implement interventions in the majority language of the community and educational services.

Qualitative research assessing the competence and confidence of service providers working with bilingual children with SEN shows that most of these professionals have failed to receive any preparation or training to help them in

their work (Hammer, Detwiler, Detwiler, Blood, & Deon Qualls, 2004; Ware, Lye, & Kyffin, 2015). For example, in a study of speech and language pathologists in the USA (N=99), Hammer et al. (2004) found that 33% of participants stated they had failed to undertake any pre-service training in relation to multi-cultural/lingual issues. With the remaining participants only receiving training in some of these issues. Training for working with bilingual children was accessed by almost a quarter of these participants. In the RoI, O'Toole & Hickey (2013), recommend that as per international guidelines, all speech and language therapists and educational psychologists should be offered training in complementary assessment methods (such as dynamic assessment), and appropriate therapy interventions for bilinguals, to enable them to confirm an accurate diagnosis.

For parents of children with ASD, the lack of bilingual resources has been referred to as a constraint, with many services and interventions only being provided in English, hence bilingualism is not always an option (Hampton et al., 2017; Jegathessan, 2011; Kay-Raining Bird et al., 2012; Kremir-Sadlik, 2005; Wharton et al, 2000; Yu, 2013). This prevented parents from undertaking bilingualism with their child. In all the studies reviewed, a vague definition of the level of bilingualism that research participants held is given or in some cases not provided at all. The generalisability of these findings is limited due to the small and non-representative sample sizes used in the research. However, from these responses it can be concluded that there are benefits and challenges of bilingualism for children with ASD according to parental reports.

2.9.3 Professional Development.

A higher quality of education for pupils in primary and post-primary schools can be obtained through the investment in effective teacher education (OECD, 2005). Teachers now work in more demanding and diverse classroom environments due to economic and social changes across the world. Subsequently, it is imperative that they are competent and motivated to teach in multicultural and inclusive classrooms (Eurydice, 2004). Professional development can enable

teachers to modify their practices, behaviours, and skills to promote positive pupil learning outcomes in the diverse classroom (Borko, 2004). Many studies have proven the correlation between teacher education/qualifications and higher student learning outcomes (Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009; Goldhaber, Liddle, & Theobald, 2013; Ring, 2010). Teachers are said to be “the single most important school variable influencing student achievement” (OECD 2005, p. 26). Professional development should be viewed as a continuum of education that occurs throughout the entire career of a teacher, starting with their initial teacher education (ITE) (Huebner, 2009; Ó Duibhir 2006; Ring, 2010; Teaching Council of Ireland, 2011).

This continuum comprises of ITE, induction and continuous professional development (Teaching Council of Ireland, 2011). During the ITE stage of the continuum, a student teacher is attending a recognised teacher education programme provided by Higher Education Institutions. (Teaching Council Policy 2011, p. 11). In the RoI, the focus of these programmes are pedagogical knowledge, teaching practice in schools, the development of research skills, cognitive behavioural and social sciences, and child development (OECD 2010). Following on from the initial ITE stage, induction is an important aspect of the continuum. Induction in the RoI is provided by the Droichead induction framework (see The National Induction Programme for Teacher, 2019, for further details). Primary NQTs must be employed in a recognised school as a mainstream, special class teacher, teacher in a special school, and fulltime resource/learning support teacher. They must complete a block of 60 days teaching from the date of their appointment. The framework incorporates two elements: school based induction and additional professional learning activities. Continuing professional development (CPD), which takes place throughout a teacher's career. It offers teachers the opportunity to develop and broaden their knowledge and teaching skills. Within the RoI, Cosán, the national framework for teacher learning has been developed by the Teaching Council of Ireland (2016). Here, teachers are recognised as being intrinsically motivated to undertake professional learning.

At the time of the present study, Cosán was undertaking a teacher led development process, where schools had the opportunity to trial the framework in their setting. The framework recognises that teachers are autonomous and responsible. Therefore, they should identify and prioritise professional development activities which will enhance the teaching and learning in their class. Within the framework, teachers can undertake CPD through a range of learning processes, for example, professional learning events, engaging in coaching or mentoring (see Teaching Council of Ireland, 2016, for further details).

In the context of bilingual/immersion education, internationally there are few courses available which are focused on preparing teachers to teach bilingual children with SEN. This in turn poses “major challenges for policy-makers, minority language immersion schools and ITE providers, who share the responsibility for the preparation, recruitment and support of suitably qualified teachers for these schools” (Ó Grádaigh, 2015, p. 168). Therefore, it would be beneficial if a suitable course for teachers was prepared and delivered. Appropriate teacher education in this area would reduce unrecognised biases (Pugach & Blaton, 2012), disproportionate referrals of SEN (Artiles, Kozleski, Trent, Osher, & Ortiz, 2010), and misconceptions on L1 and L2 development (Paneque & Rodriguez, 2009). Suitably educated teachers who are competent at utilising SEN teaching pedagogies produce higher achieving pupils (Feng & Sass, 2010). In studies on the challenges faced by French immersion teachers when meeting the needs of pupils with SEN, it was reported that teachers find it difficult to address pupil diversity in the classroom (Lapkin, MacFarlane, & Vandergif, 2006) and they often lack confidence in their teaching abilities to support these pupils (Mollica, Smith, & Phillips, 2005). In the RoI and NI, research has advocated for the need for more appropriate professional development for IM teachers in general practice and special education (COGG, 2010). Internationally, a conceptual framework has been established for which includes the following elements: (i) proficiency in two languages, (ii) assessment, (iii) culture, (iv) planning and delivering instruction and, (v) professionalism (Rodriguez, 2005).

2.9.4 Monolingual Assessment Methods for Bilingual Children.

Researchers have cautioned against the practice of using only monolingually normed tests for the identification of bilingual children with language impairments (De Lamo White & Jin, 2011; Mueller Gathercole, 2013; Paradis, 2010; Williams & McLeod, 2012). Monolingual standardised assessments are inappropriate tests for bilingual children due to content bias, linguistic bias, and the disproportionately small representation of bilingual children in the normative sample (Caesar & Kohler, 2007; Leung & Scott, 2009). Many researchers believe that for bilingual children to be accurately assessed, their language skills need to be evaluated in both languages (Hambly & Fombonne, 2013; Paradis, Genesee, & Crago, 2011; Stow & Dodd, 2005). Research findings suggest that the assessment of these children in only one of their languages may lead to a misdiagnosis of a language impairment or an inaccurate determination of the nature of their language difficulties (Crutchley, Conti-Ramsden, & Botting, 1997).

Grimm & Schulz (2014) assessed whether early German L2 learners were more at-risk of over- or under-diagnosis of a SLI using a bilingual referenced standardised assessment. They found that there was a marginal statistical difference in the over-diagnosis of a SLI in early L2 learners (27.3%, 15/55) than in monolingual Germans (14.5%, 10/69). When both groups were compared for under-diagnosis of a SLI, it was found that the early L2 group were less likely to be underdiagnosed (31.6%, 6/19), than the monolingual group (43.3%, 10/23). The researchers state that a correct diagnosis of a SLI is more difficult for children in the early L2 group. Findings of the study correspond with those of earlier research by Genesee et al. (2004), and Paradis et al. (2010). However, these findings should be interpreted with caution as the study had a small sample size, relied on the use of only one standardised assessment measure, and a parental report measure on language development. Similarly, within an Irish immersion context, Murphy & Travers (2012) found that there were benefits of bilingual assessment as it allows for a more comprehensive overview of the language abilities of the child.

2.9.5 Professional Advice Regarding Bilingualism for Children with ASD.

Qualitative research has shown that educational professionals often advise parents against bilingualism for children with communication disorders (Hampton et al., 2017; Jegathessan, 2011; Kay-Raining Bird et al., 2012; Kremir-Sadlik, 2005; Petersen, et al., 2012; Wharton, Levine, Miller, Breslau, & Greenspan, 2000; Yu, 2013). In all of the studies involving parents of children with ASD it was found that most were advised against raising their child bilingually. Most bilingual parents (N=11/19) in the research by Kay-Raining Bird et al. (2012) reported experiencing consistently negative views on raising their child with ASD bilingually. However, these research findings differ to those of Hampton et al. (2017), who found that of the seven parents who sought professional advice regarding bilingualism for their child, four reported being told that bilingualism would not be harmful for their child's development. Nevertheless, these parents often found it difficult to accept this professional opinion and remained anxious about the negative impact that bilingualism would have on their child.

2.9.6 Pupils with SEN Transferring from Immersion Education.

As mentioned previously, there are many benefits for bilingualism and immersion education. However, as with all forms of education, a percentage of pupils with SEN transfer from immersion education to a monolingual school due to several factors. For pupils with SEN, international studies have shown that these pupils often transfer from immersion education due to the academic challenges learning through a L2 poses for them. Concerns have been raised regarding the ability of this form of education to meet the diverse educational needs of these pupils (Harding, 2012; Ní Thuairisg & Ó Duibhir, 2016; Wise & Chen, 2010). Parental concern has also been listed as a reason for transfers (Dillon, 2014; Harding, 2012). Within French immersion programmes, Harding (2012, p.10) found that attrition rates were high due to parental concern and misinformation being provided to parents regarding the suitability of this form of education for their child. Advice given to parents regarding the suitability of

immersion education for pupils with SEN is often negative and this in turn often lead to these pupils transferring to monolingual schools. Genesee (2012, p. 6) states that no research exists to support these beliefs. As mentioned previously in the section on bilingualism, it takes pupils in immersion education longer to acquire comparable levels of L2 language proficiency with native L2 speakers. This period of acquisition can cause concern and frustration for parents (Wesley & Baig, 2012). Harding (2012, p. 12) states that if "parents aren't patient enough to see their children's English language skills developing before Grade 6 or sooner, then they may withdraw their children from the program." Nationally, Ó Duibhir et al. (2017) found that the primary reasons cited for the transfer of pupils with SEN from IM schools in the RoI were: their difficulties with learning, and/or due to a recommendation by an educational psychologist that IM education wasn't suitable for the child. In post-primary IM schools, concerns have been raised regarding subject choices and/or the standard of the content available within these programmes. This has led to pupils transferring to English-medium education for their post-primary education (Ó Duibhir et al., 2017).

Bruck (1985a, 1985b) examined the relationship between the academic achievement of children with low intellectual/academic ability and the decision by their parents to transfer them from immersion education to monolingual education. Research findings showed that pupils who decided to remain in immersion education did not perform any worse academically than their peers who had transferred. After one academic year, those who moved to monolingual education, still exhibited the academic, behavioural, and attitudinal difficulties they presented with prior to transfer. Furthermore, when the behaviour and attitudes of the children who had switched was assessed, they presented with higher levels of negativity towards school, and more behavioural problems than those who stayed in immersion education.

2.10 Recommended Practices in Bilingual Education

2.10.1 Bilingual Standardised Assessments.

There are limited bilingual assessment resources available internationally (Kohnert, 2010). McLeod & Verdon (2014) conducted an international evaluation of speech and language assessment resources. They found a variety of 30 assessment measures available across 19 languages. Of these measures, 70% evaluated the speech sound productions in monolinguals, 20% assessed one of the languages of the bilingual, and only 10% assessed both of their languages. Over half the measures (53.3%) were norm referenced with the remaining using criterion referencing. However, these tests failed to meet the full requirements of psychometric assessment criteria. Many professionals translate monolingual norm referenced tests to another language without the certainty of the reliability or validity of these translated tests. For example, in the context of the Rol, O'Toole & Hickey (2013) found that most speech and language therapists and educational psychologists working with Irish-English bilingual children were left with no option but to translate standardised assessments themselves from English to Irish, whilst still using the norms of the English tests to score children. This was a practice which they were dissatisfied with, but they reported that the demands of the Department of Education and Skills for standardised scores, and the lack of appropriate bilingual assessment methods left them with no choice. Pert & Letts (2001) deem this practice to be ineffective and state that the differences in normative populations, the levels of linguistic differences in a language, and the sequences of language acquisition needs to be considered if test translations are to be valid and reliable.

The development of strategies for more effective language assessment practices with bilingual children in North America and Europe recently has received a great deal of attention (Armon-Lotem, Meir, & de Jong, 2015; Bedore & Peña, 2008; Gathercole, 2014; Kohnert, 2010; Paradis, Genesee, & Crago, 2011). Strategies fall under two main themes: (i) consideration of both L1 and

L2 in assessment, and (ii) developing alternative procedures for assessing children in their L2. Through bilingual assessment, the full complement of a child's language skills can be assessed, and the nature of their difficulty can be better understood, with under or over-representation of difficulties less likely (Restrepo, Morgan, & Thompson, 2013). It is recommended that parent/teacher interviews or questionnaires, standardised tests, dynamic assessments, response to interventions, and narratives are used to gain a full understanding of the child's pattern of language development and their language skills (De Lamo, & Jin, 2011; Ebert & Kohnert, 2016; Gutiérrez-Clellen & Simon Cereijido, 2010). However, bilingual assessment often fails to be undertaken by educational professionals and support service providers. The reasons reported as to why bilingual assessment fails to be undertaken were lack of time in appointments and scheduling difficulties (de Valenzuela et al., 2016; O'Toole & Hickey, 2013). The Royal College of Speech and Language Therapists (RCSLT, 2006) acknowledge that bilingual assessment is time consuming, but reiterate its importance to establish an in-depth evaluation of the language background of the children. When assessing bilingual children, collaboration between interpreters and services providers is recommended if the speech and language therapist fails to be proficient in both of the child's languages. This will enable them to access and assess the child's development in their L1 or L2 (IASLT, 2017; Guiberson & Atkins, 2012; RCSLT, 2006, 2007). Ebert & Kohnert (2016) propose the administration of measures which can be pre-recorded in the child's minority language and interpreted by a monolingual clinician, for example, a sentence comprehension task.

2.10.2 Parental Report.

Parental report measures are a strong indicator of language impairment in children when early language milestones are assessed (Hoff, Core, Place, Rumiche, Señor, Parra, 2012; De Houwer, 2009). Detailed interviews with parents, and teachers on the development of a child's minority language have shown to be beneficial for assessing the development of the child's L1, and

their current L1 skills (Boerma & Blom, 2017; De Lamo, & Jin, 2011; Grimm & Schulz, 2014; Paradis, Emmerzael, & Duncan, 2010; Paradis, Schneider, & Duncan, 2013; Restrepo, 1998). Findings suggest that it is vital to assess the quality and quantity of language input in both languages for bilingual children to accurately assess language development (Boerma & Blom, 2017; Paradis, 2011; Tuller, 2015). Paradis et al. (2013) found that the use of a parental questionnaire regarding the L1 development of English language learners from diverse backgrounds (N=152) helped the identification of language difficulties when these learners are still only developing L2 skills. Similarly, Boerma & Blom (2017) found that parental reports of bilingual language development provide a context for the analysis of results on non-word repetition tests and narrative sampling. When these methods were combined, they provided a strong indicator of language impairment in bilingual children.

2.10.3 Language Sampling and Narratives.

These methods are a valuable source of assessment, as they demonstrate the language production abilities of a bilingual child (Bedore et al., 2010; Cleave, Girolametto, Chen, & Johnson, 2010; Costanza-Smith, 2010; Ebert & Pham, 2017; Gutierrez-Clellen, Pesco & Kay-Raining Bird, 2016; Simon-Cereijido, & Wagner, 2008). Narratives allow for the assessment of verbal fluency, lexical development, and code-switching between languages (Bedore et al., 2010; Gutiérrez-Clellen et al., 2008). For example, Jacobson & Walden (2013) analysed English and Spanish language samples from bilingual school aged children (N=48) to assess their language abilities. Findings showed that word morpheme omission errors in both languages were the best predictors of language impairments in bilingual children. These findings are consistent with research in this area on L2 learners in English (Blom & Paradis, 2013), Spanish (Grinstead et al., 2013; Simon-Cereijido & Gutiérrez-Clellen, 2007), Danish (Christensen & Hansson, 2012), and Afrikaans (Southwood & Van Hout, 2010). These studies found that children with language impairments are more likely to experience difficulties with tense production in sentence completion and repetition tasks.

Furthermore, research findings show that the results of standardised assessments and language narrative, assess different areas of language development (Bedore et al., 2010; Cleave et al., 2010; Ebert & Pham, 2017; Ebert & Scott, 2014). The studies by Ebert & Pham (2017) and Ebert & Scott (2014) show that for younger children (5 years 6 months– 8 years 11 months) there are larger size-effects of the test scores of standardised tests and narratives than in older children (9 – 11 years 2 months). For example, Ebert & Pham (2017) studied the correlation between scores on standardised tests (English and Spanish) and narrative language samples for 52 bilingual children with a primary language impairment. For the older cohort, there were minimal correlations found between the test results of both tests in either language. However, for the younger cohort, it was found that the results of narrative tests provided valuable language development data which helped with the identification of language difficulties. Therefore, it can be suggested that narrative sampling such as, wordless picture books, is a valuable method of assessment for younger children.

2.10.4 Dynamic Assessment.

Dynamic assessments which provide a cross disciplinary evaluation of a child's development has become the focus of recent research for identifying bilingual children with language impairments (Ebert & Kohnert, 2016; Kapatzoglou, Restrepo, & Martin, 2012; Martin, 2015; Pena et al., 2014; Peterson, Chanthongthip, Ukrainetz, Spencer, & Steeve, 2017). This assessment method focuses on the way in which children learn, rather than the product of their learning (Kapatzoglu et al., 2012; Hasson, Camilleri, Jones, Smith, & Dodd, 2013; Martin, 2015). Dynamic assessment involves a test-teach-retest approach. The language skills of the child are tested initially before, for example, being taught new vocabulary or sentence structure and then they are re-tested after the intervention. Research conducted in this area has compared the language development of the child before and after a period of structured intervention. It was found that bilingual children with language impairments

could be discriminated from those without language impairments using dynamic assessment (Kapantzoglou et al., 2012; Hasson et al, 2013; Pena et al., 2001; Martin, 2015; Ukrainetz, Harpell, Walsh, & Coyle, 2000). The accuracy of dynamic assessment of narratives for the identification of bilingual children with and without language impairments was assessed by Petersen et al. (2017). There were 42 Spanish-English bilingual children from Kindergarten to third grade (10 language impairment/32 without language impairment) included in the study. The results showed that English (L2) narrative dynamic assessments can predict, with a high rate of accuracy, language impairments in bilingual children.

In a study of bilingual preschool children (N=26), Hasson et al. (2013) used the Dynamic Assessment of Pre-schooler's Proficiency in Learning English, to examine their ability to learn vocabulary, structure sentences, and phrasing. The data generated from this assessment could effectively discriminate between those currently attending a speech and language therapist (N=12) and those who were never referred for additional supports (N=14). The caseload group (N=12) needed a greater amount of prompting, failed to perform as well on the post-teaching assessment, and made more phoneme errors at the pre- and post-teaching assessment than their peers without language difficulties. These findings are similar to that of Pena et al. (2014). O'Toole & Hickey (2013) suggest that those who do show positive improvements from this form of intervention, may benefit from receiving a more consistent, accurate, linguistic input.

Dynamic assessment has also been shown to be useful for predicting whether bilingual children at risk of language impairments may also be at risk of reading difficulties. Petersen & Gillam (2015) used dynamic assessment of nonsense word recoding on Spanish-English bilingual kindergarten children (N=63), to predict whether they would experience reading difficulties in reading in 1st grade. Results showed a high classification accuracy (80-100%) within the group when they were assessed again at the end of 1st grade using criterion reading measures in the areas of word identification, decoding, and reading fluency.

2.10.5 Universal Design for Learning.

Universal design for learning (UDL) is a framework for planning activities based on the standard curriculum, that recognises diversity and enables all children to learn effectively. This flexible teaching method sets to improve the educational experiences of pupils from a diverse range of backgrounds and those with learning difficulties (Rose & Meyer, 2006). The concept is underpinned by neuroscience and the summation that all pupils learn differently, hence teachers should show greater flexibility in their teaching and learning styles to promote effective learning (Rose & Meyer, 2006). There are three basic principles within UDL. The first principle states that pupils should be offered multiple methods of engagement with learning materials in class. The opportunity to choose materials promotes pupil engagement and motivation. Secondly, the pupils should be offered multiple methods of representation. This means that information should be presented using a variety of styles, to further support and develop pupil learning. Finally, multiple methods of action/expression should be offered to pupils, for example, a variety of activities which demonstrate learning or multiple assessment options (see Meyer, Rose, & Gordon, 2014, for further details of the principles). For pupils with SEN, this method of teaching instruction is thought to be beneficial, as it enables teachers to design and implement flexible and accessible learning opportunities that minimise the challenges of learning faced by these pupils when engaging with the curriculum, accessing content, and displaying knowledge (Coyne, Pisha, Dalton, Zeph, & Smith, 2010; Hartmann, 2015).

Within a French immersion education context, Pellerine (2013) found that there were benefits of implementing collaborative professional development with French immersion teachers (N=12, Grade 1-4) in relation to empowering them to use digital technology for the inclusion of pupils within the UDL framework. Mady (2018) studied the methods used by French immersion teachers to adapt classroom instruction within the UDL guidelines. Observations were undertaken in nine classrooms in one school on two occasions. Table 2.2 displays the adaption strategies used under the headings: comprehension strategies, adaptations to materials, grading, assignments/tests/assessments, reinforcing, and pacing.

Table 2. 2

The Universal Design for Learning adaptations used in French immersion classrooms adapted from Mady (2018).	
Comprehension Strategies	Demonstrate concepts Use of manipulatives English to clarify Pre-teach vocabulary Script on the board Modify curriculum Rephrase, restate, question Use simpler language
Adaptations to Materials	Highlight text Provide supplement reading Assist with note taking Type handwritten materials Provide special equipment Give students manipulatives Modify text
Grading	Self-assessment Peer-assessment
Assignments/Tests/Assessments	Read directions aloud Give directions in stages Give assignment in steps Written back-up to oral directions Oral cues/prompts Give examples/models Lower level of difficulty Lower reading level Students respond orally
Reinforcements	Student repeats directions Teach study skills Provide study guides

2.10.6 Guidelines for Language Interventions with Bilingual Children.

The goal of the speech and language therapist should be “to promote enhanced language abilities in all spoken languages” (IASLT, 2017, p. 16). It is recommended that dual and multiple language support services are further developed and through the recruitment of bi/multilingual speech and language therapists, increased access to interpreting services should be provided. When language interventions are being planned for bilingual children, it is recommended that the pattern of language development in each language is considered and compared to the typical patterns of bilingual language development (Speech Pathology Australia, 2009; Kohnert, 2010). A child’s current level of proficiency in each language needs to be assessed and the future opportunities for language development in each language across a range of communicative contexts should be assessed (IASLT, 2017). From these assessments, the important decision regarding the language of intervention should be made. When children are monolingual speakers of a language other than English, the IASLT (2017) recommend that support and initial interventions are provided through their L1. “Parents need to be aware that working in the child’s home language initially is to the child’s benefit, both in terms of their linguistic and socio-emotional development, even if it is not the language of education” (IASLT, 2017, p. 16). Hence, it is proposed that the development of L1 skills, fosters the further development of L2 skills (Kohnert, 2010; Gutiérrez-Clellen, Simon-Cereijido, & Sweet, 2012).

2.11 The Outcomes of Irish Medium Education & Exposure to the Irish Language

In the RoI, pupils receive up to two school years’ immersion in the Irish language, before they commence English as a curriculum subject (DES, 2015b). This allows students to develop a greater proficiency in Irish (DES, 2015b). Ó Duibhir et al. (2015) found that most of these schools (N=70) in the RoI begin formal English in senior infants (55%), 43.4% in junior infants, and only 1.4% waited

two full years until first class. Pupils in IM schools in NI receive up to three years' total immersion in the Irish language before they undertake the formal English curriculum in Key Stage One, Year 3/4. (McKendry, 2006; Ní Chinnéide, 2009). Through undertaking case studies in six IM primary schools in NI, Ní Chinnéide (2009), found that most of these schools commence formal English instruction in Year 4 (4/6 schools). However, Ó Duibhir et al. (2015), found that most schools in NI (N=20) began English instruction at age 8/9 (68.4%), and less than a quarter (21%) a year later. Whilst some schools (10.5%) reported beginning English in junior infants.

The outcomes for pupils in IM education are positive overall (Dillon, 2009; Harris, 2007; Harris et al., 2006; Ó Duibhir, 2009; Ó hAiniféin, 2008; Parsons & Lyddy, 2009a, 2009b; Shiel, Gilleece, Clerkin, & Millar, 2011; Strickland & Hickey, 2016). Recent studies have shown that pupils perform as well as or better than their English-medium, mainstream counterparts in the curriculum areas of English and mathematics. Strickland & Hickey (2016) compared the levels of attainment of pupils in IM schools in the RoI (N=569) with that of pupils in English-medium mainstream schools (N=6,704) using the data on 9-year olds from the 'Growing Up in Ireland' (GUI) study. Within the study, there were two IM groups based on their home languages (see Table 2.3). When the scores for both IM groups (N=569) were combined in English vocabulary, the mean (103.4), is slightly higher than that of those in English-medium schools (99.7). Scores in mathematics for those attending IM schools show that there is no significant difference between their levels of achievement and that of their English-medium peers. Findings suggest that there is an association between the SES of the child and their scores in these tests. McCoy, Quail & Smyth (2012), also found no significant difference between these scores. Strickland & Hickey (2016, p. 18), propose that the score results for pupils in IM schools within the mathematics test may fail to truly reflect their ability, as tests were taken in English rather than Irish. However, when undertaking National Assessments (2009) in mathematics, pupils in 2nd class (N=2036) in IM schools who took

the test through English (8%), scored a mean (256) which was not significantly statistically different from those taking the test through Irish (92%, mean 276). Similar findings were reported for the 6th class cohort (Shiel et al., 2011).

Table 2.3 The comparison of National Assessment (2009) results from Irish-medium and English-medium schools (from Strickland & Hickey, p.18).

Children from:	Irish-English Homes in Irish-immersion M (SD)	English-only homes in Irish-immersion M (SD)	English-only homes in English-medium schools M (SD)
English vocabulary	103.3 (14.2)	100.9 (15.2)	99.7 (15.1)
Mathematics	102.1 (15.1)	100.7 (12.3)	99.8 (15.0)

2.11.1 The Profiles of Pupils attending IM Education.

Research findings show that most pupils attending these schools come from homes where English is their L1 (Barrett, 2016; McAdory & Janmaat, 2015; NCCA, 2007; Nig Uidhir, Ó Cathalláin, & Ó Duibhir, 2016). However, Ní Thuairisg & Ó Duibhir (2016), suggest a further change in the home language of pupils attending these schools. They found that similar to previous findings, over half (50.8%) of all parents (N=321) reported speaking mainly English with a few Irish words or phrases included occasionally to their children. A smaller proportion of parents (0.3%) reported speaking only Irish to their children, and more interestingly 0.6% of parents spoke a home language that was neither Irish nor English. This figure demonstrates the increasing diversity among pupils attending IM schools. Hence, it is not surprising that many parents of pupils in these schools have reported having a low level of Irish language ability (Harris, Forde, Arden, Nic Fhearaile, & Ó Gorman, 2006; Kavanagh & Hickey, 2013; Ní Thuairisg & Ó Duibhir, 2016). The study by Ní Thuairisg & Ó Duibhir (2016) found that 25.4% of parents participating in their study (N=321) had functional Irish. This means that they were native Irish language speakers (7.3%) or could converse fluently in Irish (18.1%). The remaining parents (62.5%) had a lower standard of

Irish. Of these parents, 2.2% had no Irish at all, 9.5% had a few words, 22.5% had some simple sentences, and 40% could make some conversation. Figure 2.2 shows the findings of the study by Kavanagh (2013) who analysed parents (N=552) and their partners (N=478) Irish language proficiency. The research analysed proficiency in terms of understanding, speaking, reading, and writing.

Understanding	Self n(%)	Partner n(%)	Speaking	Self n(%)	Partner n(%)
Not a word	5 (0.9)	32 (6.6)	Not a word	6 (1.1)	42 (7.5)
A few words	41 (7.3)	142 (29.2)	A few words	68 (12.1)	160 (33.1)
Short sentences	113 (20.1)	107 (22.0)	Short sentences	172 (30.6)	104 (21.5)
Bits of conversations	219 (38.9)	114 (23.5)	Bits of conversations	200 (35.5)	121 (25.1)
Most conversations	139 (24.7)	67 (13.8)	Most conversations	71 (12.6)	34 (7.0)
All conversations	46 (8.2)	24 (4.9)	All conversations	46 (8.2)	22 (4.6)
Reading			Writing		
Not a word	3 (0.5)	58 (12.1)	Not a word	16 (2.8)	91 (16.2)
A few words	50 (8.9)	125 (26.2)	A few words	93 (16.5)	153 (31.8)
Short sentences	190 (33.8)	135 (28.2)	Short sentences	220 (39.1)	127 (26.4)
Short article/letter/note	242 (43.0)	117 (24.5)	Short article/letter/note	185 (32.9)	88 (18.3)
A book	77 (13.7)	43 (9.0)	Any document	39 (6.9)	22 (4.6)

Figure 2.2 Parents self-assessed Irish language proficiency in the study by Kavanagh (2013, p. 137).

In the RoI, research suggests that pupils in these schools are more likely to come from homes with a higher socio-economic status. Shiel et al. (2011) compared the parental occupations of pupils from IM, Gaeltacht, and English-medium schools using an international socioeconomic index. As shown in Figure 2.3, the majority of 6th class pupils (45%) from the IM cohort (N=1,390) lived in families with a high SES, 36% came from families with medium SES, and 20% from families with a low SES. Findings for the 2nd class pupil cohort (N=1,640) were similar. Of these pupils, 45% came from a high SES, 30% from a middle-class SES, and 25% from families with a low SES. Within all three of these

categories, pupils from IM schools were more advantaged in terms of their SES in comparison to pupils in Gaeltacht and English-medium schools (see Shiel et al., 2011, p. 56 for further details).

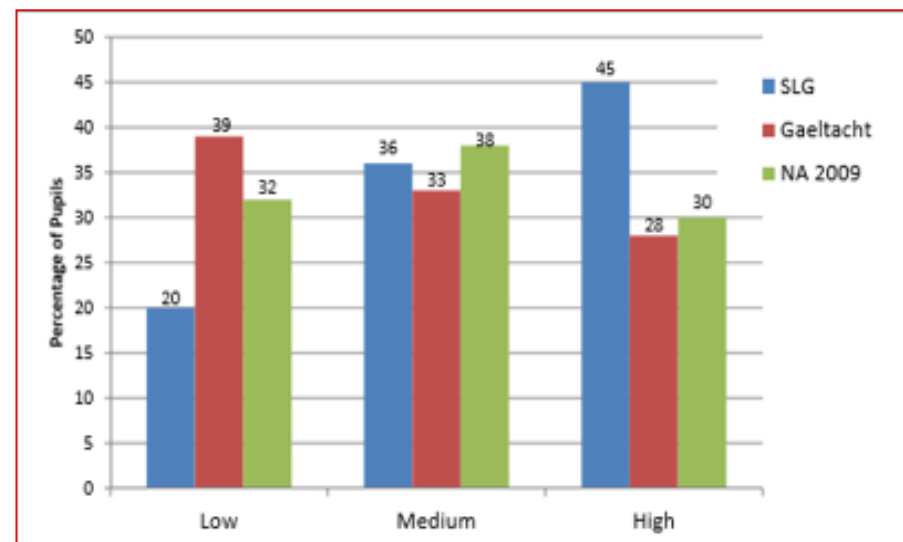


Figure 2.3 Percentages of 6th class pupils from high, medium, and low socio-economic status families (from Shiel et al., 2011, p. 16).

In NI, Nig Uidhir et al. (2016) assessed the SES of pupils in IM schools through the number of pupils entitled to free meals in school. Those receiving free meals, generally come from families with a low SES, where parents are in receipt of income support, are asylum seekers, or are earning an annual income of £16,190 or less per annum (Education Authority, 2019). Of the cohort studied (N=101), 46% of pupils were entitled to free meals. This statistic was much higher than that of the Department of Education NI (27%) for all primary school types for the academic year 2012/2013. Hence, it can be suggested that pupils in these schools in NI tend to come from areas of lower SES than their peers attending English mainstream schools in NI, and those in IM schools in the RoI. As mentioned previously, 21 of the 28 IM stand-alone schools in NI were located in areas of low SES and included in the Extended Schools Programme.

2.12 Parental Involvement in IM Schools

Parental involvement in IM schools in the RoI is thought to be higher than in English mainstream schools (Coady & Ó Laoire, 2002; Mac Giolla Phádraig, 2003; McAdory & Janmaat, 2015). For example, Strickland & Hickey (2016), found that pupils in these schools were more likely to read with their parents. In the week prior to their assessment in the GUI study, 46% of pupils in English-medium schools (N=6,704) had read with their parents, compared to 55% of pupils from IM schools (N=264). Furthermore, McCoy et al., (2012) found that these pupils are more likely to participate in out-of-school cultural activities. Of the 9-year-old, IM school cohort (N=569), 65% of pupils reported being involved in cultural activities (music, drama, and social networking), this is in comparison to 52% of children attending English-medium schools (N=6,704). Their involvement in these activities shows a greater level of parental involvement than their English-medium counterparts. A correlation was also found by the researchers for this cohort between participation in cultural activities and higher levels of academic achievement in English and mathematics, even when the factor of social background was controlled within the statistics (McCoy et al., 2012, p. 52). Kavanagh & Hickey (2013) conducted mixed-method research on '*Identifying Challenges to Parental Involvement Among Immersion Parents*' in IM schools (N=563 parents). Over two thirds of participants reported their low level of Irish language proficiency as a barrier to their involvement (Kavanagh & Hickey, 2013, p. 12). Other themes that were identified as barriers for these parents include: (i) practical issues, such as time, childcare, and rival commitments, (ii) parents were often rebuffed by their child when they attempted to be involved in their education and speak Irish, (iii) school community factors, such as, the lack of suitable resources, (iv) a dissatisfaction with the support offered to parents enabling them to participate more actively in their child's education, and (v) the lack of invitation or opportunity to become involved in school activities. It was stated that there were fewer opportunities for them to become involved in established schools (5 years +) than in non-established schools.

2.13 SEN Prevalence in IM Schools

At the time of the present study (academic year 2017/2018), there were 145 IM schools in the RoI. In NI, there were 35 IM schools, 28 of which were stand-alone schools and the remainder (n=7) were Irish language units being hosted by English-medium schools. In the RoI, two known studies using quantitative questionnaires have been conducted to ascertain the prevalence of SEN in IM schools (Barrett, 2016; Nic Gabhann, 2008). In the earlier study by Nic Gabhann (2008) an overall prevalence rate of 7.9% was established for children with low incidence SEN. Of all those enrolled in the schools surveyed (N=12,829), 13% (N=1,719) of pupils were receiving additional support from the learning support teacher (DES, 2000). The methods cited by schools for the selection of pupils for this support was: non-standardised testing, standardised testing (scores below the 10th percentile), parental concerns, and class teacher referrals. Unfortunately, the more recent study by Barrett (2016) fails to provide an overall prevalence rate for comparison. However, both studies assessed the prevalence of SEN by category. Figure 2.4 compares the sub-groups reported in these studies. ASD which is listed as the 2nd most prevalent subgroup by Barrett (2016) was previously listed as 9th by Nic Gabhann (2008). Developmental co-ordination delay has risen from 6th (2008) to 3rd (2016). Emotional behavioural disturbance (EBD) previously listed 7th (2008), is now 4th (2016), and attention deficit hyperactivity disorder (ADHD) listed 14th (2008) has moved to 5th (2016). When assessing these findings, it is important to be mindful of the limitations of these studies, such as the low response rate of participants, the lack of parental input, and the implausibility of some survey answers due to a misinterpretation of translations within the questions.

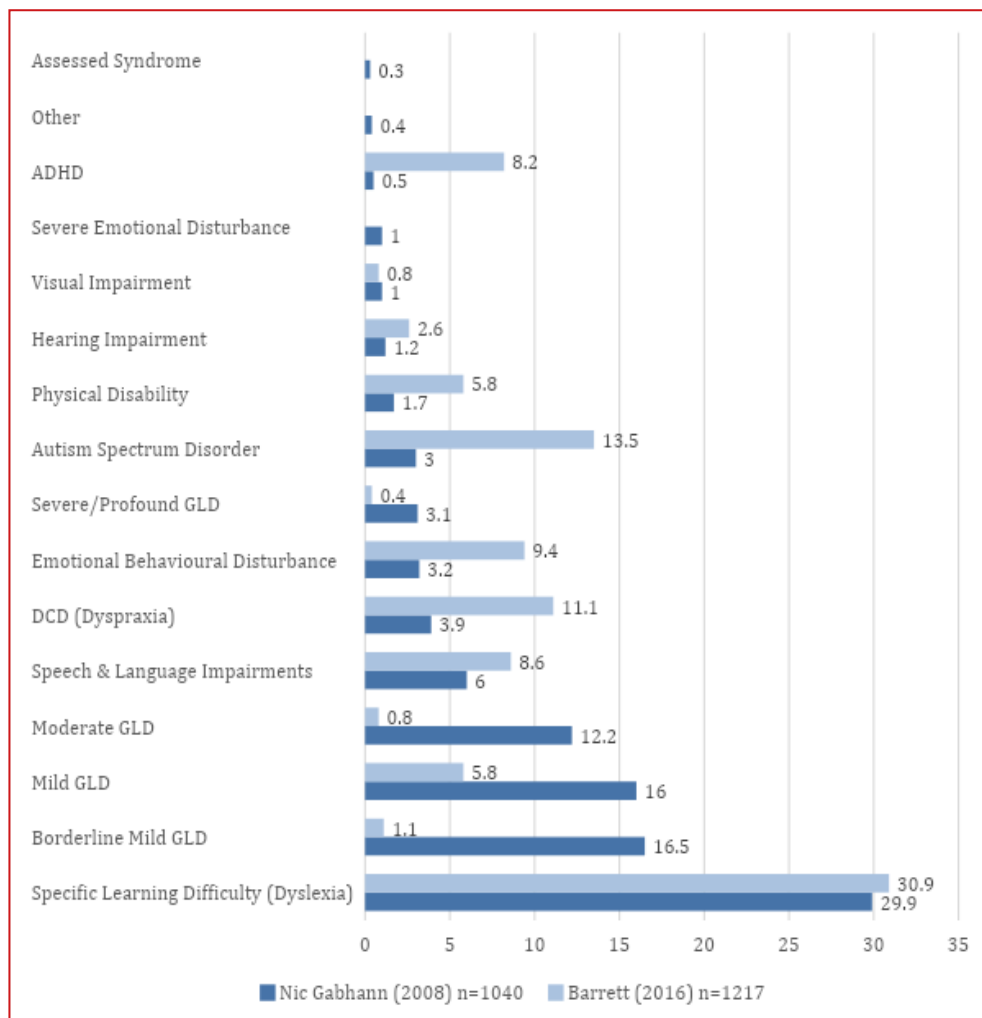


Figure 2.4 A comparison of the most frequently reported sub-groups of SEN in the studies by Nic Gabhann (2008) and Barrett (2016).

When the prevalence of SEN in IM and English-medium schools in the RoI was compared, Banks & McCoy (2011), found that less pupils in IM schools presented with literacy and numeracy difficulties (N=8 schools, mean enrolment

143 pupils), than English-medium schools (N=130, mean enrolment 143 pupils). There were also more pupils with numeracy difficulties in English-medium schools, than IM schools. For example, no IM school had over 40% of pupils with numeracy difficulties, while 6% of English-medium schools had over 40% (Banks & McCoy, 2011, p. 110). Nearly all IM schools (83%) had less than 5% of pupils with EBD, while the rate was 64% for English-medium schools (Banks & McCoy, 2011, p.110, see Smythe, Darmody, McGinnity, & Byrne, 2009, for further details also).

Only one known study has been conducted in this area in NI. Through the use of a quantitative questionnaire, Ní Chinnéide (2009, p. 115) found that 17% of primary pupils (N=2,632) in IM schools were recorded as having SEN. The most frequently reported SEN were moderate GLD (35%), mild GLD (19%), and social and emotional behavioural difficulties (15%) (see Figure 2.5 for further details).

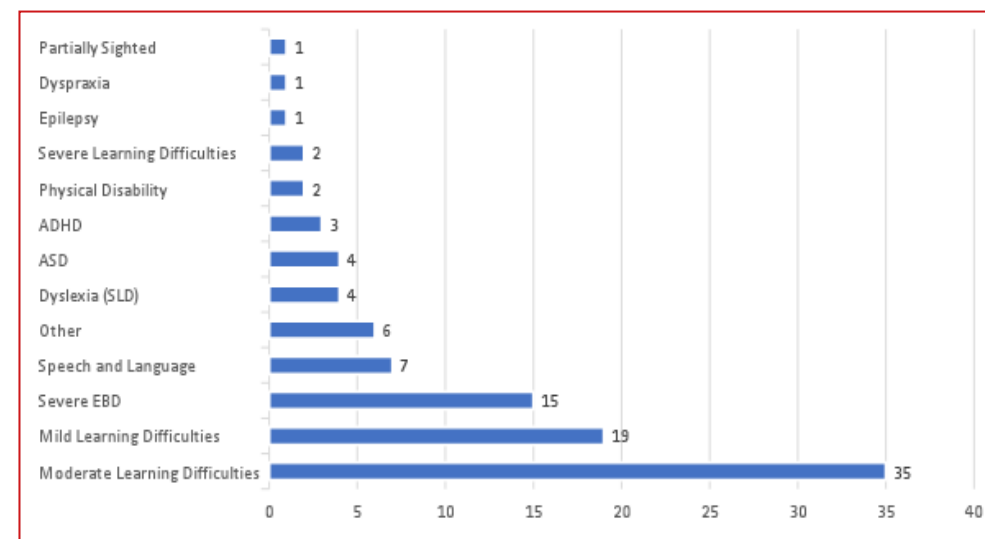


Figure 2.5 The sub-groups of primary pupils with SEN (N=431) in IM schools in Northern Ireland, as identified by Ní Chinnéide (Adapted from: Ní Chinnéide, 2006, p. 122).

When the findings by Ní Chinnéide (2009) are compared to English-medium schools in NI (see Figure 2.6), the three most prevalent categories of SEN reported for both IM and English-medium schools in NI are the: (i) cognitive and learning difficulties, (ii) social, emotional and behavioural difficulties, and (iii) communication and interaction difficulties. There is a slight difference further down the scale with pupils in English-medium schools having a greater number of pupils with medical conditions/syndromes (5%) than IM schools (2%). Both education sectors present with equal amounts of students with physical disabilities (2%).

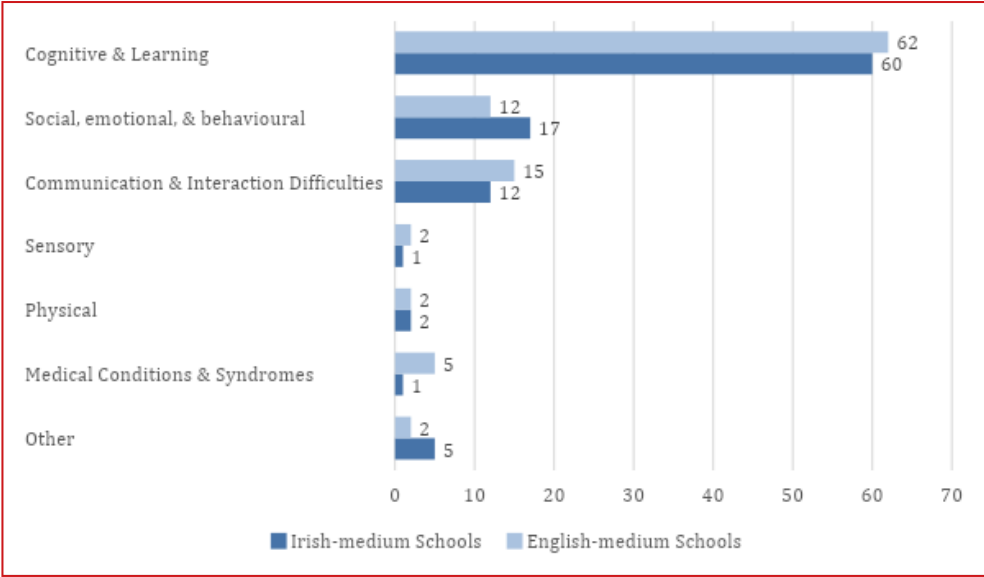


Figure 2. 6 A comparison of SEN sub-groups in primary IM and English-medium schools in Northern Ireland (Adapted from: Ní Chinnéide 2009, p. 120-123).

2.14 SEN Identification & Provision Primary IM Schools

As shown in Table 2.4, the most common instruments (93.3%) used by IM schools for the identification and assessment of pupils with SEN in the RoI, are teacher observation, the Middle Infant Screening Test (which identifies

early English literacy difficulties), and the Drumcondra primary Irish test for the assessment of reading and listening (Barrett, 2016). As mentioned previously, schools in the earlier study by Nic Gabhann (2008) also utilised non-standardised assessment, standardised assessment, teacher report, and parental concern to select pupils for additional support. It is important to note that many of the assessment instruments listed below can only be administered through the medium of English, for example, dyslexia screening tests. Consequently, it can be concluded that many IM schools in the RoI, are using English-medium assessment methods to evaluate the needs of their pupils.

Table 2. 4 The assessment methods used for the identification of SEN in IM schools in the Republic of Ireland (adapted from Barrett, 2016, p. 16).

Assessment Method	No. of Schools (N=75)	% of IM Schools
Observation	70	93.3%
Middle Infant Screening Test (GL Assessment, 2019)	70	93.3%
Drumcondra (Gaeilge) (ERC, 2019c)	64	85.3%
Non-Reading Intelligence Test	61	81.3%
Sigma-T (English Reading) (Fallon, 2019a)	53	70.7%
Drumcondra (English Reading) (ERC, 2019c)	50	66.7%
School Developed Assessments	47	63.5%
Dyslexia Screening Tests	47	62.7%
Micra-T (Maths) (Fallon, 2019b)	46	61.3%
Drumcondra (Mata) (ERC, 2019c)	35	46.7%
Other Tests	30	46.7%
Wide Range Achievement Test (Pearson, 2019)	13	17.3%
Wechsler Individual Achievement Test (Wechsler, 2019)	09	12%

In NI, teachers in IM schools (N=6), participating in case studies, referred to the use of a combination of assessment instruments and strategies (Ní Chinnéide, 2009, p. 144). Similar to schools in the RoI, a high level of emphasis was placed on teacher observation along with the use of formal assessment. All schools reported assessing Irish literacy in Years 2-4, using the 'Áis Mheasúnaithe na Luathlitearthacht' (Clay & Nig Uidhir, 2007). Assessment in mathematics was undertaken by all schools using the National Foundation for Educational Research maths assessment, and IM CASS mathematics. Upon commencement of formal English literacy (2 schools in Year 3 and 4 schools in Year 4), respondents reported administering the Bury Infant Check (Pearson & Quinn, 1986), An Observation Survey of Early Literacy Activity (Clay, 2006), and assessments in non-verbal reading. When the language of assessment for mathematics in RoI schools was investigated in 2008, it was revealed that, 58% of schools (N=63) were conducting standardised mathematics assessment through English (Nic Gabhann, 2008). The remaining 42%, undertook this assessment through the medium of Irish. This practice is inconsistent with the ethos of IM education, but it is thought to occur due to the linguistic challenges faced by those studying mathematics through Irish (DES, 1999). In NI, parents and teachers, both reported that the assessment of pupils in IM schools through English, when it is not the language of instruction in the school, does not provide a comprehensive overview of the abilities of the child (Ní Chinnéide, 2009).

In the RoI, it was reported that 97.8% (N=90) of IM (Gaeltacht and Gaelscoileanna) schools undertake learning support/resource teaching in small groups, and 88% (N=81), practised individual withdrawal (Barrett, 2016). An association was found between the size of the school and the method of additional teaching support that was delivered, with larger schools (300+ pupils) most likely to implement team teaching and station teaching (Barrett, 2016, p. 16). Mata sa Rang (Maths Recovery, 30 schools) and FRIENDS (26 schools), were the most reported, commercial team-teaching programmes offered by schools (N=92). Research findings state that in IM schools, pupils receive the

most support in English literacy, mathematics second, and Irish third (Barrett, 2016; Nic Gabhann, 2008; Ó Duibhir et al., 2015). When the language of instruction for the provision of additional teaching support in mathematics in the RoI was assessed, it was reported that of the teachers surveyed (N=62), 54% provided this support through both Irish and English, 36% solely through Irish, and 10% through only English (Nic Gabhann, 2008). Through the qualitative data gathered, teachers commented on the difficulties that children have using and understanding mathematical terminology through Irish. In a later study by Barrett (2016), a lower number of schools (28%, N=21), were providing additional teaching support in mathematics through a combination of English and Irish. When pupils are learning mathematics through a L2, it is important to establish whether pupils are having difficulty with the mathematical concepts or the learning of mathematics through Irish (NCCA, 2007, p.39).

In NI, Ó Duibhir et al (2015) state that 94.7% of schools (N=20) provide support in Irish literacy, 89.5% in English literacy, and 84.2% in mathematics. These findings suggest that Irish receives the most support in IM schools in NI compared to the least support in these schools in the RoI (see Ó Duibhir et al., 2015 for further comparisons). Of the schools providing support in mathematics in NI (84.2%), 78.9% do so through the medium of Irish, and the remaining 5.3% through English only. This is thought to be because IM units attached to English-medium schools, often do not have teachers who can provide this support through Irish. The intervention methods used by schools providing additional support are (Ní Chinnéide, 2009): Reading Recovery (Clay, 2002), Jolly Phonics (Lloyd, 2005), Fónaic na Gaeilge (BELB, 2005), Áis Mheasúnaithe sa Luathlitearthacht (Clay & Nig Uidhir, 2007), Speech and Language Resources (Blacksheep Press, 2008), and Primary Movements (2008).

2.15 Professional Development for Teachers in IM Schools

The need for specialised teacher education programmes for teachers in IM schools throughout all-Ireland, has been reiterated in several reports (Barrett,

2016; Byrne, 2002; COGG, 2010; Knipe, Bunting, Ó Labhraí, Nig Uidhir, & Mhic Aoidh, 2004; Ní Chinnéide, 2009, Nic Gabhann, 2008). Even though the need for these courses has been highlighted in the past, there has been little progress made in this area. For the academic school year 2007/2008 it was established that 52% of learning support teachers (N=68) in schools in the RoI had more than 15 years teaching experience (Nic Gabhann, 2008). Approximately a third of teachers surveyed (N=23) had more than 20 years teaching experience. When the educational qualifications of these teachers were investigated, it was found that 23% of teachers (N= 68) had completed a Department of Education and Skills (DES) sanctioned SEN course (Nic Gabhann, 2008). In more recent research, a higher rate of 91.8% of teachers in IM schools (N=61), had formal training in special education (Barrett, 2016, p. 18). Unfortunately, the definition of what their formal training entailed was not provided in the study. Similarly, a high proportion of primary (75%, n=40) teachers in NI reported receiving formal SEN training (Ní Chinnéide, 2009). The most common types of training received were: Initial Teacher Education (37%), Education and Library Boards (22%), INSET (12%), and a Master's in Education (containing an element of SEN, 10%). However, teachers who have completed sanctioned SEN courses, have reported that no reference is made to IM education, or SEN in IM education (Ní Chinnéide, 2009, p. 270; Nic Gabhann, 2008, p. 55).

2.16 The Challenges for Teachers in the Provision of SEN for Pupils in IM Schools

In NI it was reported through a questionnaire that 74% of primary IM teachers (N=39) held a high level of dissatisfaction with the current SEN provision for pupils (Ní Chinnéide, 2009). The primary reasons cited for this dissatisfaction were, a lack of appropriate resources (28%), a lack of assessment tools (21%), a lack of services through Irish (15%), and a lack of appropriate supports in IM education (10%). In the RoI, teachers, also referred to assessment resources, a lack of external support through Irish, and the lack of appropriate resources available

for these pupils as a challenge (COGG, 2010; NCCA, 2007a; Nic Gabhann, 2008). In a review of *'Language and Literacy in Irish-medium Primary Schools'* the National Council for Curriculum and Assessment (2007), found that the most common challenges for teachers (N=241) providing learning support for pupils with SEN were: standardised testing through Irish, supporting mathematics through Irish, accessing external support services through Irish, and the availability of appropriate Irish books in all curriculum areas. Teachers within this review also referred to a lack of immersion education guidelines available to them to facilitate decision making in the areas of policy, planning, and provision. This opinion was also reinforced in a later study by Ní Chiaruáin (2009). In the study by Barrett (2016, see Figure 2.7), almost half of teachers (46.9%) felt that pupils found verbal expression through Irish difficult. Almost a third (32.8%) reported that pupils can become confused between Irish and English. While, almost 40% of respondents claim that pupils have difficulty accessing the curriculum through Irish. Furthermore, it was noted by 62.5% that the Irish language is a barrier to parental involvement in schoolwork for a lot of pupils.

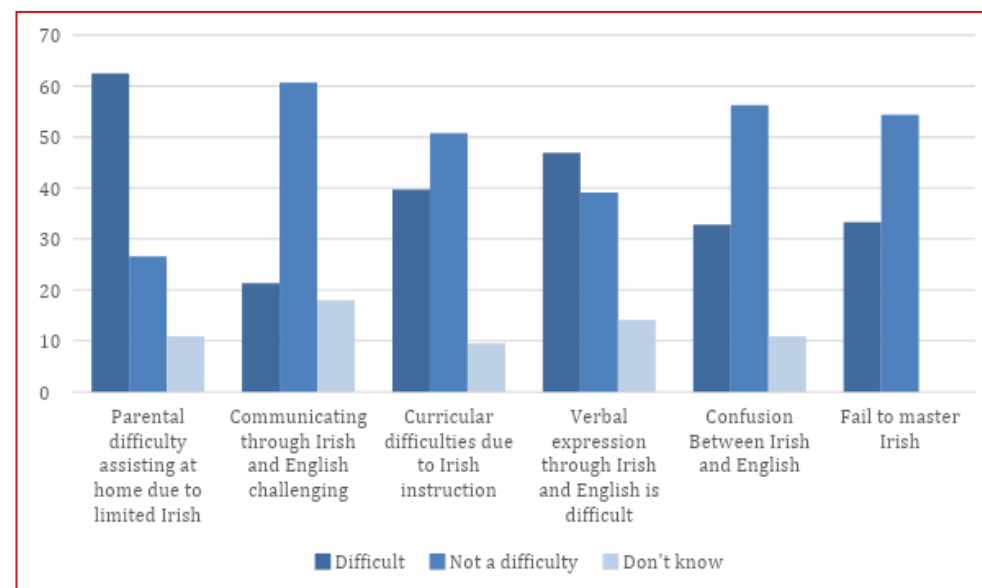


Figure 2. 7 Teachers' (N=59) perceived challenges of Irish immersion education for pupils with SEN in the Republic of Ireland, results in percentages (Barrett, 2016, p. 22).

Educational psychologists work in partnership with schools, parents, and pupils in the identification of pupils with SEN. They also offer support services to these pupils through consultation, research, and assessment. Using a questionnaire, it was found that, 19% (N=26) of educational psychologists (NI) had little or no understanding of bilingualism (Ní Chinnéide, 2009). Additionally, almost half (46%), had little or no understanding of the IM education sector. This may be attributed to the lack of professional development received by them in these areas. Of the participants, 31% had received training in working with bilingual children, while only 5% had trained in working in the IM education sector. Most respondents (72%), felt that training in these areas would be beneficial for them in their work. Hence it is of no surprise that these professionals encountered challenges when working in IM schools. The most frequently reported challenges these professionals experienced were: (i) their lack of proficiency in the Irish language (24%), (ii) the lack of assessment materials available through Irish (20%), and (iii) the ability to make an accurate diagnosis because of the above (12%). To overcome these challenges, they reported the use of an interpreter (28%), consulting the class teacher or SENCO (28%), consulting a colleague with Irish (17%), informing themselves (11%), and combining measures (11%). Subsequently, when conducting assessments, most of these educational psychologists, did so through the medium of English (81%). Irish and English was used during the assessment process by 19%, and no educational psychologist reported using Irish exclusively (Ní Chinnéide, 2009). Nearly all teachers (95.5%, N=84) in IM and Gaeltacht schools in the RoI, stated the importance of the educational psychologist understanding IM education. Furthermore, 76% (N=67), referenced the need for these professionals to speak Irish (Barrett, 2016).

In NI, the possibility of creating standardised educational psychology assessments through Irish was investigated by the Department of Education

(NI). It was found that it would not be feasible to create these assessments due to the small population who speak Irish, as it would be a costly process. Also, there would need to be a higher amount of educational psychologists fluent in Irish available to use the tests (DENI, 2011b). Due to these limitations, the report suggests that educational psychologists should be more mindful of the bilingual backgrounds of children when assessing a child in one language and that teachers should be further supported in their work (DENI, 2011b, p.23). Barnes (2017) investigated the experience of three educational psychologists working with pupils in IM schools. These participants recommended that for an accurate diagnosis of children with dyslexia in an IM school the psychologist would need: a knowledge Irish phonics/word structures, Irish language fluency, and they suggested that it would be beneficial to have an Irish language assessment available in phonological processing, word reading, and spelling.

2.17 Teachers' Perceived Benefits of IM Education for Pupils with SEN

Barrett (2016) assessed teachers' (N=64) viewpoints on the advantages of IM education for pupils with SEN (RoI, see Figure 2.8). Teachers reported that these pupils were at an advantage in relation to L2 (90.8%) and L3 acquisition (81.5%). Almost all respondents (92.2%), maintained that IM education in primary school would assist these pupils when they enter post-primary school. They felt that pupils benefit in relation to their working memory (78.5%) and develop a sense of pride in the Irish language and heritage (77.8%). Additionally, it is thought that the good discipline (60.3%) acquired in these schools, was a positive advantage for pupils.

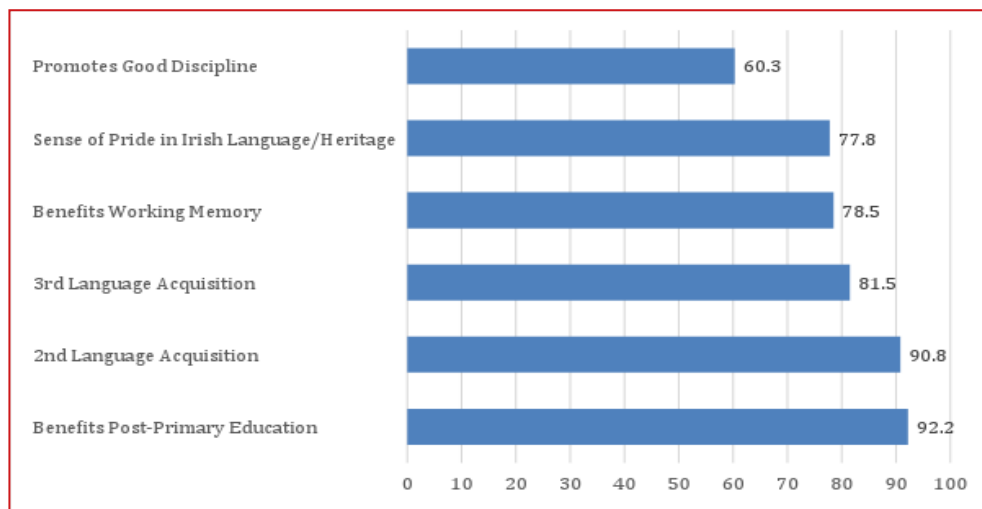


Figure 2. 8 Teachers' (N=59) perceived benefits of Irish immersion education for pupils with SEN in the Republic of Ireland, results in percentages (Barrett, 2016, p. 22).

2.18 Parental Experiences of SEN Provision in IM schools

In-depth interviews were conducted with eight parents/guardians of pupils with SEN in IM schools in NI (Ní Chinnéide, 2009). Parents were asked about their experiences in the areas of: identification of SEN, in-school support for pupils, access to IM education, and parents as partners in meeting the needs of pupils. Almost half of all respondents (3/8) interviewed "were concerned at the length of time taken to identify difficulties, to address concerns regarding their child's academic progress and to make referrals for external assessment" (Ní Chinnéide, 2009, p. 216). These parents reported that they were unable to be more involved in their child's education due to their lack of proficiency in the Irish language. This in turn, made it difficult for them to gauge the level of their child's educational progress and identify areas of concern. In these cases, parents failed to recognise the difficulties their child was experiencing until they were in Year 4, and had commenced English reading. Similarly, this was also reported by parents of children in IM schools in the RoI (Kavanagh & Hickey, 2013; Ní Thuairisg & Ó Duibhir, 2016).

Half of all respondents (4/8) commented that when pupils were identified with SEN, assessment procedures could not be undertaken through Irish. Therefore, parents felt that the assessment results failed to accurately reflect the level of their child's academic ability, as it was not undertaken in the language of classroom instruction. Parents in the study (2/8) raised concerns in relation to the role of classroom/teaching assistant and the continuity of provision for pupils within this role (Ní Chinnéide, 2009, p. 217). It was reported that there were occasions in which their child had to leave school early as no additional assistance was available to them. Parents felt that this form of exclusion had negative implications for their child in relation to their self-esteem, feeling different from peers, and behaviour (ibid, p. 217). Also, the need for the classroom assistant to have a high level of proficiency in Irish was noted as necessary for providing additional support in line with the ethos of an IM school. Frustration was reported with the lack of external educational and health support services available through Irish (Ní Chinnéide, 2009, p. 218). Two of the parents (N=8) referred to the importance of home/hospital tuition through Irish for their child with medical problems. Their difficulty in accessing this tuition, caused them to fear that IM education would become inaccessible for their child after a long period of absence from school.

The lack of trained external professionals who can operate through the medium of Irish has also been reported by parents as a barrier. Half of all participants (4/8), commented that they were dissuaded against IM education for their child due to their SEN. The repercussions of this were that two of the parents (N=8) no longer sent their child to an IM school. One of these parents reported the difficulty their child experienced when moving to English-medium education. "There were feelings of loneliness as a result of being separated from friends as well as difficulties in adapting to a new school, new teacher, and the change of language" (Ní Chinnéide, 2009, p. 219).

2.19 SEN pupils in IM schools transferring to English-medium schools

Through a review of the limited literature available on immersion education and SEN, the National Educational Psychological Service (NEPS, 2007, as cited in COGG, 2010) reported that it should not be assumed that:

- children with specific learning difficulties would gain an added advantage from attending English-medium education,
- depending on their level of intellectual ability, children would benefit more from attending English-medium education, and
- bilingualism is unattainable for children with a language disorder.

NEPS maintain that each child has varying needs, and these should be considered when choosing the appropriate form of education for children with SEN. These opinions mirror the findings of the literature reviewed previously on bilingualism for children with ASD, SSLD, and dyslexia, that suggest that these children can develop a L2 with no detrimental effects to their L1 abilities (Kay Raining Bird et al., 2016). Furthermore, it has been established that pupils with SEN can achieve comparable levels of academic achievement in immersion schools to monolingual peers with the same condition (Bruck, 1972; Genesee, 1976).

2.20 Pupil Voice in Special Education Research

Several studies have been undertaken incorporating pupil voice to assess the perspectives of children with SEN in relation to school (Gaona, Palikara, & Castro, 2018; GUI, 2009; Howard, Katsos, & Gibson, 2019; Norwich & Kelly, 2004; Prunty, Dupont, & Mc Daid, 2012; Sellman, 2009; Squires, Kalambouka, & Bragg, 2016; Travers et al., 2010). Pupils have been given an opportunity to have their say on different aspects of their schooling through interviews or questionnaires. Within these studies, common themes can be identified. Friendship is a theme, which has emerged a positive aspect of school for pupils with SEN, as it is an

informal support system for them (Gaona, Palikara, & Castro, 2018; Norwich & Kelly, 2004; Prunty et al., 2012). Travers et al. (2010) found that pupils received this support through playing together, talking, and listening to each other. There were 63 references made by the pupils in that study to playing games together, and 54 references to how playing together was a method of inclusion. The quality of school experiences and friendships were also cited as being central to pupil happiness in school in a more recent study of 38 primary and post-primary children with SEN in the RoI (Prunty et al., 2012). This is consistent with international findings on the effect of pupil relationships with teachers and peers on school enjoyment and engagement (Ring, O'Sullivan, Ryan, & Burke, 2018; Sellman, 2009). In a study of 12 individuals with ASD aged 16-19 years, all participants commented on the fact that friendships that they had formed in primary school were a crucial part of their lives.

A positive school atmosphere/climate which is defined through relationships, tone, and attitudes was also identified as important for pupils with SEN (Squires et al., 2016). Examples of sharing, helping each other, and displaying pupils' work were given by pupils in the Travers et al. (2010) study. Research has found that if the children have a positive relationship with their teacher or viewed their teacher in a positive light, this made the children feel more included (Norwich & Kelly, 2004; Riley, 2004). Accessing additional teaching support was a positive aspect identified by pupils in research (Lewis et al, 2007; Norwich & Kelly, 2004; Prunty et al., 2012). In the study by Norwich & Kelly (2004) pupils marginally reported that they preferred undertaking additional teaching support through withdrawal (40%, n=20) than in class support (33%, n=17). Whilst in Squires et al. (2016), pupils reported that withdrawal in the resource room enabled them to focus better, provided them with an emotional sanctuary, and helped them develop a positive relationship with the teacher. This was due to several factors such as less noise, less distraction, more attention, and more appropriate work. Nevertheless, there were negative aspects of withdrawal cited by pupils in that study, such as, being without their friends and the work being too hard. Interestingly, research has shown that specific subjects such as

art, computers, and physical education are preferred by pupils with SEN due to their more inclusive pedagogy (Howard et al., 2019; Riley, 2004, Travers et al., 2010). For example, it was reported in a study on 11 bilingual children with ASD (aged 7-14 years) who were learning English as an additional language in school in the UK, that art and technology were their favourite subjects.

2.21 Summary & Conclusion

In this chapter the concept of bilingualism was investigated. It is clear that there are benefits of bilingualism for children, such as, the cross linguistic transfer of skills, advantages in cognitive skills/working memory, better communication skills, and the development of cross-cultural competencies (see Bialystok, 2009 for overview). Nevertheless, bilingual children can have lower levels of verbal fluency and a smaller vocabulary in each language. The ability of children with ASD, a SSLD, and dyslexia to acquire bilingualism was also examined. Research states that children with ASD and SSLD can achieve proficiency in a L2 with consistent and adequate exposure to the L2. For those with dyslexia, bilingualism is also attainable, but it is important to be cognisant of the fact that language and reading deficits in the L1 can be evident in the L2. An overview of immersion education was provided, and research has shown that pupils in this form of education can academically achieve comparable levels to their peers attending monolingual schools. Unfortunately, a dearth of research exists in the outcomes of this form of education for children with SEN. However, the findings available show that these pupils can also academically achieve comparable levels as their monolingual peers with the same condition. Nevertheless, there are challenges faced by immersion education schools when meeting the needs of pupils with SEN. Challenges are evident in terms of: parental involvement, parent anxiety/concern, the professional advice regarding the suitability of bilingualism for these children, accessing bilingual services, teacher education, and assessment. Practices which are recommended to help overcome these challenges include, universal design for learning, bilingual assessments, bilingual language interventions, and parent implemented home language programmes.

Within an IM context, it is clear that similar to immersion schools internationally, pupils in these schools can obtain comparable academic levels to their monolingual peers in literacy and mathematics. Also, these schools encounter similar challenges to those listed above by international immersion schools when meeting the needs of pupils with SEN. However, teachers do perceive that there are benefits of IM education for pupils with SEN. Benefits have been referred to in the areas of bilingualism, L3 acquisition, benefits for post-primary school, working memory, and self-identity/pride. Overall parents reported that they were satisfied with the education their child received in these schools in NI. However, they did report that they faced challenges in accessing assessments and support from outside agencies.

Having reviewed the relevant literature, the present study addresses the gaps in the limited research available in the following areas: the benefits of bilingualism for pupils with ASD, SSLD, and dyslexia, the reasons why parents choose immersion education for their child who has SEN, the challenges faced by parents and teachers when pupils are being educated through Irish as a L2, the challenges faced by pupils with ASD, SSLD, and dyslexia when being educated through Irish, the perspectives of pupils within these categories of SEN in relation to IM education, the number of pupils with SEN transferring from IM education and the reasons why these transfers occur. The next chapter examines the research methods employed in the present study to assess the additional supports required by pupils with SEN in IM schools to help them in their learning.

3.1 Introduction

A mixed methods approach was implemented to investigate the primary research question, what are the additional supports required by pupils with SEN in primary IM schools? The sub-questions of this research which were also investigated are outlined in Table 3.1. In this chapter, the principles of mixed methods, quantitative survey, and case study research are examined. Detailed descriptions are provided of the construction of the questionnaire, the rationale for questioning, and data collection methods used in stage one. The case studies undertaken in stage two are described. Participant recruitment and the ethical considerations of each stage are reviewed. The credibility, reliability, and validity of the present study is also discussed.

Table 3.1 The research sub-questions of the present study.

Sub-questions	Stage One (Survey Research)	Stage Two (Interviews and Observations)
What are the current prevalence rates for pupils with SEN in Irish-medium (IM) schools?	X	
How many pupils in these schools are receiving additional support from the special education teacher?	X	

What methods are used to select pupils for this additional support?	X	
What external support services are provided through the medium of Irish to these schools?	X	
How many pupils with SEN have transferred from IM schools over the past three academic school years?	X	
What are the educational practices in place in schools to meet the needs of pupils with SEN?	X	X
What are the benefits of IM education for pupils with SEN?		X
What are the challenges of educating pupils with SEN through the medium of Irish?	X	X
What are the similarities and differences between SEN provision in IM education and immersion education internationally?	X	X

3.2 Mixed Methods Research

Mixed methods (MM) research allows questions to be answered which cannot be investigated effectively using only quantitative or qualitative methods (Creswell & Plano-Clark, 2011; Johnson, Onwuegbuzie, & Turner, 2007; Small, 2011; Teddlie & Tashakkari, 2003). Within this method both forms of research are used. When the results from the quantitative and qualitative stage are similar, this means that there can be greater confidence in the overall results (Creswell & Plano-Clark, 2011). Nevertheless, if the results from each stage differ, this can provide a greater insight into the nature of the case and the research question (Cohen, Manion, & Morrison, 2013). The words, pictures, and narratives of qualitative research add meaning to quantitative data. Whilst statistical findings provide a context and meaning to the qualitative data gathered. There are four types of mixed methods designs (Creswell & Plano-Clark, 2011):

- (i) Triangulation involves the use of quantitative and qualitative methods concurrently. All the data that is collected is interpreted at the end of the process and results are compared,
- (ii) Embedded research focuses on the use of one approach more predominantly,
- (iii) Exploratory research adopts a two-phase sequential approach, where the qualitative research is conducted in the first stage and quantitative research in the second, and
- (iv) Explanatory research is the use of the two methodologies sequentially. Here the emphasis is on the quantitative research being conducted first and then the qualitative research. This allows for the findings of the qualitative stage to further expand and explain those of the quantitative stage.

In the present study explanatory MM research was conducted to: (i) explain the current practices in place in IM schools to meet the needs of pupils with SEN, and (ii) investigate the additional supports required by IM schools to meet the needs of pupils with SEN. MM research offers all the strengths of quantitative and qualitative research, whilst offsetting the limitations or weaknesses of each methodology (Cohen, Manion, & Morrison, 2013; Small, 2011). Nevertheless, there are factors and limitations to consider prior to implementing this method. Prior to undertaking MM, it is imperative to establish that it is an appropriate method to meet the objectives of the research (Creswell, 2009). Researchers must be cognisant of the timing of the stages and evaluate: (i) whether they are to be undertaken concurrently or sequentially, (ii) which method will be applied first, and (iii) whether each stage will hold an equal weight (Robson & McCartan, 2016). When analysing data, it should be considered whether the findings will be evaluated individually or triangulated.

3.3 The Ontology & Epistemology of this Mixed Methods Research

For the present study, the transformative paradigm was adopted (Mertens, 2007). It builds on the earlier work of Guba & Lincoln (2005) who maintain that paradigms must include: axiology (nature of ethics), ontology (nature of reality), epistemology (nature of knowledge/relationships), and methodology (nature of systematic enquiry). This philosophical framework was chosen as it allows researchers to be part of the change process in communities through research (Mertens, 2016). For example, it has been used in research on those with disabilities and HIV/AIDS (Mertens, 2010a). It is hoped that the findings of the present study, which is similar to a needs assessment, will enable pupils with SEN in IM primary schools, access to the additional supports, resources, and services needed to help them reach their potential when being educated through the medium of Irish. Hence, the objective of this study is not to merely describe the context and leave the community no better off, it is to make recommendations that will promote positive change (Mertens, 2016).

This paradigm has been used previously in case study research (Canales, 2013; Flynn, 2017; Shannon-Baker, 2016) as well as in needs assessments within marginalised groups (Altschuld & Watkins, 2014; Barnhardt, Reyes, Vidal Rodriguez, & Ramos, 2018; Chilisa, 2005; Jackson et al., 2018; Watkins & Altschuld, 2014). For example, Jackson et al. (2018) used this paradigm to assess the needs of a predominantly Latino community in the USA in relation to “key social determinants of health and well-being” (Jackson et al., 2018, p.111). Four research stages were conducted in the needs assessment; (i) key informant interviews (N=14), (ii) 13 focus group interviews (N=94), (iii) survey of 157 community members, and (iv) follow up interviews. At the end of the process recommendations were made as to how the needs of this community could be more adequately met. Within an Irish context, Tynan (2018, p.89) investigated the dilemma of Irish exemptions for pupils with Williams syndrome within this paradigm. This is an intellectual disability which arises from a rare neurodevelopmental condition and children present with mild to moderate GLD

(Dykens, Hodapp, & Finucane, 2000; Tynan, 2018). It has been found that children with this condition often have an aptitude for language learning, nevertheless, they are often excluded from learning Irish. Semi-structured interviews were conducted with the parents and teachers of seven children with this condition. Recommendations were then made regarding Irish language learning for individuals within this category of SEN.

Ethically, the focus is not just on fulfilling institutional regulations, but also on the promotion of human rights and social justice for participants (Mertens, 2012a, b). It relates to finding ways to include those who may often be marginalised in society, for example, those with disabilities (Mertens, 2007, 2010a, b, 2012a, b, 2016). Within the present study, pupils with SEN in IM schools who may not have previously been given a voice, or an opportunity to participate in research were included using interviews (Mertens, 2007, 2012a, b). From an ontological viewpoint, it is assumed that reality is socially constructed (Mertens, 2007). This implies that individuals occupy a position of power within society and that certain individuals within society may be at greater risk of exclusion (Mertens, 2007, p. 216). Hence, the assumption of this paradigm is that one reality exists, to which there are multiple opinions based on an individual's position of power and privilege in the community (Mertens, 2010 a, b). The epistemological underpinnings state that to know reality, the researcher must interact with participants. To understand how findings are situated within the context, the social and historical factors, and the power differences within the community must be acknowledged (Mertens, 2007, p.216; Romm, 2015). The development of respectful, trusting relationships between the researcher and all stakeholders in the community being studied is recommended. This process:

illuminates the nature of the challenges that communities face; the strengths in communities that can be drawn upon to address these challenges; and the development, implementation, and evaluation of strategies that are designed to ameliorate the challenges and contribute to social progress (Mertens, 2016, p. 6).

This paradigm therefore offers a philosophical framework which is in line with the objectives of the present study. The emphasis is on maximising the strengths and opportunities of IM education for pupils with SEN, whilst minimising the challenges and barriers they encounter learning through a L2. The use of multiple research and data analysis methods is recommended within this paradigm (Mertens, 2007, 2010a, 2010b, 2012). A cyclical process was implemented in the present study, where the results of the first cycle informed the inquiry of the second cycle (Jackson et al., 2018; Mertens, 2007, 2009, 2010, 2012; Romm, 2015). When data gathered from both stages were initially analysed it was decided that the use of thematic analysis was best, as it allowed for greater triangulation of the data in Chapter 6. Participation of all members of the school community is central to the present study. Remaining objectively neutral is a challenge of this paradigm for the researcher (Mertens, 2012; Romm, 2015). However, the theory that a "neutral objective observer will get the facts right" has been challenged by other researchers, who maintain that to know something you must be immersed in it (Christians, 2005, p.148). This challenge was overcome in the present study, through the use of a research journal and discussions with research supervisors.

3.4 Stage One: Quantitative Survey Research

Online survey research was selected because it allowed statistical information along with data related to the population's opinions, beliefs, and practices to be gathered (Cohen et al., 2013; Sue & Ritter, 2007). This method provided a cross-sectional analysis of:

- (i) the prevalence of pupils with SEN in IM schools,
- (ii) the challenges schools face when educating these children through the medium of Irish,
- (iii) the practices IM schools implement to meet the needs of pupils with SEN, and

- (iv) the additional supports required by schools to promote the inclusion of all students.

Hence, a ‘snapshot’ is provided of the selected population at one time (Cohen et al., 2013; Robson & McCartan, 2016). A benefit of this method is that it will allow for the replication of this study in the future, to assess whether any changes have occurred (Cohen et al., 2013). Survey research is cost efficient and enables a wide population to be represented (Andrews, Nonnecke, & Preece, 2003; Cohen et al., 2013; Lefever et al., 2007; Wright, 2005). It provided numerical, descriptive, and explanatory data about the practices in schools, and teachers’ beliefs regarding the challenges they encounter when educating pupils with SEN through the medium of Irish. Another advantage of this method is that it reduced the time taken to distribute, gather, and process the data collected (Cohen et al., 2013; Sue & Ritter, 2007). Participant anonymity was protected through using a school identification code and no personal details of participants were collected when submitting completed responses (Sue & Ritter, 2007; Wright, 2005). School staff completing the questionnaire could do so from any location and over a period of time. Nevertheless, there are challenges which can be encountered when using this method, for example, poor sampling, poor question design and wording, incorrect or biased responses, and a low response rate (Cohen et al., 2013; Sue & Ritter, 2007; Wright 2005). These challenges were overcome in the present study by using proportionate randomised stratified sampling and constructing a questionnaire that corresponds with the literature reviewed and previous research in this area (outlined in further detail below). Responses were also checked to identify and correct errors.

3.5 Participant Profiles

For the cohort of primary IM schools in the RoI (N=145) a proportionate randomised stratified sampling was utilised to select 20% (N=29) of schools for participation. This method of sampling allowed for greater precision than random sampling, as it guarded against the under- or over-representations

of school types within the sample (Cohen et al., 2013; Robson & McCartan, 2016). Furthermore, it allowed for the analysis of results within each stratum independently. Firstly, the entire school population was divided into strata based on their location, type of school, and the numbers of pupils enrolled. As shown in Table 3.2, schools were divided into eight strata. Once divided into strata, schools were listed numerically. Starting at the top of the list (number one), every 5th school was selected to participate in the study. This form of probability sampling gave each school within their stratum an equal opportunity of being selected (Robson & McCartan, 2016). If a chosen school decided against participating, the researcher then returned to the list of schools for that stratum and invited the next school on the list to participate. This process was repeated until the quota of schools for each stratum was reached.

Table 3.2 The representative sample of Irish-medium schools in the Republic of Ireland selected for this study.

School Type	Number of Schools	Representative Sample
DEIS Schools	15	3
Schools with Special Classes	4	1
Urban (City) Schools with Teaching Principal (<203 students)	7	1
Urban (City) Schools with 1/2 Streams (203 – 410 Pupils)	21	4
Urban (City) Schools with 2/3 Streams (>410 pupils)	13	3
Small Town Schools With Teaching Principal (<203 pupils)	30	6
Small Town Schools with 1/2 Streams (203-410 pupils)	44	9
Small Town Schools with 2/3 Streams (>411pupils)	11	2
Total	145	29

3.6 Participant Recruitment

The researcher wrote to the Boards of Management and principals of the selected sample and invited them to participate. The aims of the study were outlined in the plain language statements and informed consent forms sent (see Appendices C & D). A hard copy of the questionnaire was also included to allow schools to view the questionnaire. The following week the online questionnaires were sent in an email to the school's email address. This method of participant recruitment has been recommended, as it is seen to be less intrusive and gives the potential participants time to decide whether they wish to partake in the research (Sue & Ritter, 2007). Schools willing to take part in the study, were invited to contact the researcher by e-mail or telephone if they had any questions or comments. If the researcher failed to hear from schools after a two-week period, a follow up phone call was made to the school to ascertain whether they were willing to participate. Those completing the online questionnaire were required to provide electronic informed consent before they could proceed. If this consent failed to be provided, schools were disqualified and unable to access the questionnaire. Some schools chose to complete the hard copy of the questionnaire sent to them and they completed the hard copy of the consent form also. These were returned by post to the researcher.

3.7 Construction of the Questionnaire

The questionnaire contained 31 questions which were divided into eight sections and included both multiple choice and open-ended questions (see Appendix E). The design incorporated some adaptations from previous research in this area and was influenced by the literature reviewed in Chapter 2 (as shown in Table 3.3). This allowed for the comparison of research findings. The questionnaire was piloted using three teachers (two special education teachers and a vice-principal). Recommendations made were based on the terminology and the ease of submitting answers online and the appropriate changes were made.

Table 3.3 The design of the anonymous online survey by section.

Section	References
General background information	Barrett (2016); DES (2017) Circular 017/2017; DES (2014) Circular 030/2014; Ní Chinnéide (2009); Nic Gabhann (2008); Travers (2007); Travers et al., (2010).
The Special Education Teacher	DENI (1998) Code of Practice; DES (2017) Circular 013/2017; DES (2005a) Circular SP ED 02/05; DES (2000) Learning Support Guidelines; Travers et al. (2010).
Pupils with SEN	Cosgrove et al. (2014); DENI (1998) Code of Practice; NCSE (2010); NCSE, Annual Report (2016, 2017); Ní Chinnéide (2009).
Assessment	Barrett (2016); DES (2011); Hambly & Fombonne, 2013, 2014; Ní Chinnéide (2009); Nic Gabhann (2008).
Resources and additional supports	Ebert et al., 2014; Kohnert, 2010; Ní Chinnéide (2009)
Services for pupils with SEN	de Valenzula et al., 2016; Ní Chinnéide (2009)
Educational practices	Barrett (2016), Ní Chinnéide (2009), Nic Gabhann (2008); NCSE (2014a, 2014b).
Pupils with SEN transferring to other schools	Jegathessen, 2011; Kay-Raining Bird et al., 2012; Ní Chinnéide (2009); Yu, 2013.
Conclusion	Designed by the researcher

3.8 Rationale for Questioning

3.8.1 General Information.

General background information on the person completing the questionnaire, such as, their position in the school and level of teaching experience was

collected along with general information regarding the school. For example, the number of teachers employed in the school and the number of pupils enrolled in the school. Schools were also asked whether they were a designated disadvantaged school (DEIS).

3.8.2 The Special Education Teacher.

The school's special education teacher allocation for the current school year was collected (DES, 2017a). The total number of pupils who were attending this teacher for additional teaching support in each school was assessed and the gender breakdown of these pupils. The number of pupils who had an educational psychological assessment was investigated, along with the methods used to select pupils for additional teaching support. The questions in this section were adapted from previous research by Travers (2007) and Ní Chinnéide (2008).

3.8.3 Pupils with SEN.

Here, the prevalence rates of pupils with SEN in IM schools were gathered. The terminology of this question was adapted from the previous research by Barrett (2016), Ní Chinnéide (2009), and Nic Gabhann (2008). Schools were asked about the number of pupils in each class presenting with a range of SEN. The category list selected for this question was based on previous research and the literature reviewed in Chapter 2 (Barrett, 2016; NCSE, 2016; Ní Chinnéide, 2009; Nic Gabhann, 2008).

3.8.4 Assessment.

A general question was asked to ascertain what type of assessment methods were used by schools. For example, standardised tests through Irish, standardised tests through English, diagnostic assessments etc. Following on from this, schools were asked how many pupils in each school scored below a STen of four on a list of standardised tests (Rol). They were also asked the cut-off points used (STen scores or Percentiles) on standardised tests to select

pupils for additional teaching support. These questions were developed by the researcher and allowed for an assessment of how pupils are selected for additional teaching support in schools compared to the guidelines outlined by the Department of Education and Skills (DES, 2017a).

3.8.5 Resources and Additional Supports.

Questions were asked to establish What additional supports or resources would help schools meet the needs of pupils with SEN learning through the medium of Irish. A list of factors were rated by schools to establish what areas were; very challenging, challenging, somewhat challenging, or never challenging for schools (Ní Chinnéide, 2009).

3.8.6 Services for Pupils with SEN.

A list of service providers were given to establish what external support services were available to schools through the medium of Irish, English, a combination of Irish and English, or not available at all (Ní Chinnéide, 2009). Schools were also asked what services are currently unavailable through the medium of Irish, that are needed.

3.8.7 Educational Practices.

The educational practices of the school and the person filling in the questionnaire were evaluated in this section. Schools were asked whether they use Individual Education Plans (IEPS). This question was adapted from previous research by Barrett (2016) and Nic Gabhann (2008) for comparisons. Furthermore, it allowed for comparisons with English-medium schools. An open-ended question regarding the educational practices of the school for meeting the needs of pupils with SEN was also included. The person completing the questionnaire was asked how often they used a range of educational practices listed. This provided the researcher with a 'snapshot' (Robson & McCartan, 2016) of the practices that were being used by either the principal or special education teacher/SENCO

in schools at the time. This question was adapted from previous research by Travers (2007).

3.8.8 Pupils with SEN Transferring to Other Schools.

Schools were asked how many pupils with SEN transferred from their school over the last three academic school years (September 2014 - September 2017) and the reasons why these transfers occurred. These questions relate to the literature reviewed in Chapter 2 (Kay-Raining Bird, Genesee, & Verhoeven, 2016; Jegathessen, 2011; Yu, 2013) and were also adapted from previous research by Ní Chinnéide (2009).

3.8.9 Conclusion.

Participants were asked whether they would be interested in partaking in the second stage of this study, involving case study research (reviewed below). They were also thanked for their participation and invited to add any additional comments they may have.

3.9 Stage Two: Case Study Research

There are many definitions of case study research. Differences in definition stem from the different approaches used during the process of case study design, development, and implementation (Robson & McCartan, 2016). This method enables researchers to understand individual units in a real-life context (Yin, 2018) and experience “the activity of the case as it occurs in its context and in its particular situation” (Stake, 2006, p. 2). It is clear from these definitions that its core purpose is an in-depth analysis of an individual unit or issue within its context, enabling the researcher to gain an understanding of the issue from the participants’ perspective (Creswell, 2013; Merriam, 2009; Simons, 2009; Stake, 2006; Yin, 2018). It is the process of investigating the ‘how, why, and what’ of real-life situations (Flyvbjerg, 2011; Merriam, 2009; Robson & McCartan, 2016; Simons, 2009; Stake, 2006; Stewart, 2014; Yin, 2018). Case study research

advocates believe in the collection of multiple sources of data using multiple methods (Merriam, 2009; Stake, 2006; Yin, 2018). However, most often cases are of a qualitative design only (Creswell, 2014; Denzin & Lincoln, 2011; Merriam, 2009; Miles et al., 2014; Stake, 2006). The methods most recommended for this approach are observations, interviews, and document/artefact analysis (Denzin & Lincoln, 2011; Merriam, 2009; Simons, 2009; Stake, 2006; Stewart, 2014; Yin, 2018). The present study incorporated observations and interviews. It was important that all cases selected were relevant to the nature of the study and that they relate to the issue of interest (Yin, 2018). Cases may be selected for theoretical replication, in which contrasting findings are generated, or for literal replication where similar findings are generated. To maintain objectivity, researchers must display intellectual honesty, manage bias, acknowledge the limitations of the study, collect data meticulously, and relay findings accurately (Flyvbjerg, 2011; Merriam, 2009; Stake, 2006; Stewart, 2014; Yin, 2018). Objectivity is needed as often the perceptions of researchers can become part of the findings (Creswell, 2014; Stake, 2006; Yin, 2018). Hence, the rigour of this method is often negatively impacted when a systematic procedure fails to be followed. This in turn can negatively affect the direction which the findings and conclusions take (Yin, 2018). It is often suggested that the findings fail to be generalisable due to the small number of participants (Robson & McCartan, 2016).

3.10 Participant Recruitment

As mentioned previously, as part of the questionnaire implemented in the first stage, schools were asked whether they wished to participate in this case study research. The principals of schools who expressed an interest in participating were sent a plain language letter and informed consent form explaining the research process (see Appendices F&G). Informed consent was then sought from the Board of Management of schools willing to participate. Upon approval from each Board of Management, the researcher then sought written informed

consent from the principals, teachers, SNAs (RoI), classroom assistants (NI), parents of pupils with SEN enrolled in IM schools, pupils with ASD/SSLD/dyslexia enrolled in IM schools, and parents of children with SEN who transferred from IM education. An assent form (Appendix O) was also completed by pupils indicating their willingness to participate in the study. This form is used in research when participants are too young (under 18 years of age) to provide informed consent but they are old enough to understand the proposed research process. All participants were provided with a plain language statement and informed consent form (see Appendices H-O). Thereafter, a date was arranged with the schools to undertake the case studies. Initially it was also anticipated that the special educational needs organiser (SENO), educational psychologist, and home school liaison officer of the schools participating in the case studies would complete an anonymous online survey based on their experience of SEN provision in IM schools. Unfortunately, there was a very low response rate for this and a representative sample was unavailable.

3.11 Participant Profiles: Stage Two

In total, four pupils with ASD, four with dyslexia, and three children with a SSLD were included in the study. Initially, it had been hoped that pupils with mild GLD would be included in this stage of the research, however, it was not possible to recruit enough pupils for this cohort. Pupils were enrolled in four mainstream IM schools, three in the RoI and one in NI. A comprehensive overview of the pupils participating in the present study is provided in Chapter 5. The breakdown of the number of pupils participating in each school was: (i) School A had one pupil with dyslexia and one pupil with SSLD, (ii) School B had one pupil with ASD and one pupil with dyslexia, (iii) School C had one pupil with dyslexia, one pupil with SSLD, and two pupils with ASD, and (iv) School D had one pupil with ASD, one pupil with SSLD, and one pupil with dyslexia.

Purposive sampling was used to select schools who expressed an interest in taking part. Schools were chosen based on their geographical location for ease

of data collection, size, availability, and willingness to share their knowledge and experience (Creswell & Plano Clark, 2011; Palinkas, Horwitz, Green, Wisdom, Duan, & Hoagwood, 2015). Participating pupils were selected by the schools based on their availability and willingness to partake and them being a 'typical case' (Palinkas et al., 2015). This allowed the researcher to describe what is typical for these pupils with SEN learning through a L2 (Palinkas et al., 2015). The age range of participants was from 4-12 years old. Pupils were from a range of classes from Junior Infants to 6th Class. Parents of pupils with SEN who withdrew their child from IM education due to their learning difficulties were recruited using convenience sampling. It is important to note, that these participants were not from the schools participating in the case studies. The researcher asked teachers and parents that she was acquainted with, if they knew of any suitable parents who had withdrawn their child from IM education due to their SEN, that would be willing to take part in the present study. When suitable parents were identified, a plain language statement and informed consent form were sent to them, providing them with information on the study and inviting them to participate. The limitations of this sampling methods used in stage two, are that the research findings may be vulnerable due to selection bias and influences beyond the researcher's control and this in turn may impact on the generalisability of the research findings (Jager, Putnick, & Bornstein, 2017).

3.12 Data Collection Methods

3.12.1 Individual Semi-Structured Interviews.

Interviews that lasted a maximum of 30 minutes were conducted with principals (N=4), class teachers (N=10), special education teachers (N=4), and one SNA in the four participating schools. This enabled the researcher to gain a deeper understanding of the data gathered from the first stage relating to (i) the practices in place to meet their needs, (ii) the challenges these pupils face when learning through a L2, and (iii) the additional supports they require

(Cohen et al., 2013; Kvale, 1996). Interviews with teachers, principals, and the SNA were adapted from and influenced by previous research in this area (Ní Chinnéide, 2009; Travers et al., 2010; Ware, Butler, Robertson, O'Donnell, & Gould, 2011). Questioning addressed the following topics (see Appendix P for interview schedule):

- (i) participants' background information regarding their role and experiences of working with pupils with SEN,
- (ii) their opinions on the perceived benefits and challenges of IM education for children with SEN,
- (iii) the practices implemented to overcome these challenges, and
- (iv) the additional supports required to help these pupils access the curriculum.

Interviews were also conducted with parents of children with SEN in IM education (N=9) (see Appendix Q) and parents of children with SEN who have transferred from these schools (N=6) (see Appendix R). The questions posed in these interviews were adapted from previous research in this area (Ní Chinnéide, 2009; Travers et al., 2010; Ware et al, 2011). Questioning focused on:

- (i) the perceived benefits and challenges their child experience/experienced when being educated through the medium of Irish,
- (ii) the practices the school implements/implemented to address these challenges, and
- (iii) whether there are any areas where IM schools could do more to include children with SEN.

3.12.2 Interviews with Pupils who have SEN.

The interview process with children who have ASD (N=4), a SSLD (N=3), and

dyslexia (N=4) was conducted as a conversation. This provided the children with the opportunity to be heard. "Children, just like adults, are citizens who hold their own views and perspectives, they have the competencies and the rights to be heard, and they are able to speak for themselves if appropriate methods are used" (Einsorsdóttir, 2007, p. 197). Pupil voice is important in educational research for children with SEN, as their experiences and perspectives can inform practices and policies (Flynn, 2014; Norwich & Kelly, 2004; Sellman, 2009). The pupil's involvement in the present study, provides results which are more meaningful and have greater validity, as all school stakeholders are included in the research process. The pupils were interviewed in their classroom or the classroom of the special education teacher they attend, to make them feel as safe and comfortable as possible. The researcher was never alone with the children during the interviews. A member of the school staff was present at all times. The duration of these interviews was approximately 20 minutes. The interview schedule (see Appendix S) was modified in terms of the language used based on the level of ability of individual pupils however, the question themes in all interviews remained the same. The pupils were asked to bring the researcher on a tour of their school. An adult from the school whom the pupil trusted accompanied the researcher/pupil on this tour. During the tour, they were asked to show the researcher the following areas of the school and take pictures of these areas using a digital camera:

- Areas of the school where different activities take place,
- Their favourite place in the school,
- What they like most about the school?
- What they think is the most important area in their school?
- What is their least favourite place in the school?
- Where in the school they feel proud/good?

- Where in the school they feel included?
- Where in the school they feel least included?

An instant camera was used during this process and the photographs that the pupils chose to take were discussed. Short narrative notes were taken by the researcher during the tour, based on the photographs taken and the reasons given. These photographs are not presented in the results chapter or appendices of this study in order to preserve the anonymity of the research participants and their schools. No photographs were taken of people during this activity. Permission was sought from the pupil and their parent/guardian to record and transcribe these conversations. During the conversation about the photographs, the researcher and the pupil created a storybook based on ‘My School’. This allowed the pupils to be active and creative whilst discussing the photographs. The pupils kept these books. They are not presented in the findings or in the appendices of the study, again to maintain the anonymity of participants and schools. In some cases, the interview was undertaken and recorded as a discussion when walking around on the tour of the school due to the pupil’s needs. In these instances, the pupils also kept the photographs. This research method was chosen as the pupil’s perspective is used as the subject of the interview. The pupil had the autonomy to decide what to photograph. The pictures directed the interview, pupils were not asked direct questions from an adult’s perspective, and the interview was not adult directed. The use of photography also gave the pupils, who had varying levels of ability, the opportunity to express themselves both verbally and non-verbally, which is important for children who may have poor language skills, and/or poor writing skills (Einersdóttir, 2007). Furthermore, they had a concrete product at the end of the process, in which they took pride in. Pupils were given a visual timetable of the process involved (see Appendix T).

3.12.3 Observations.

Pupils were observed, for half a school day in their natural school environment,

across a range of academic lessons and activities. Clarification was sought from school staff, or the pupil if necessary, to validate the observations noted (Houghton, Casey, Shaw, & Murphy, 2013). The benefits of this research method were, that the researcher played a passive, non-intrusive, non-interventionist role, merely noting down the factors being studied in a structured manner (Cohen et al., 2013, Robson & McCartan, 2016). The observation schedule (see Appendix U) was constructed through adapting and combining different aspects from observational research undertaken previously around inclusion in schools for pupils with SEN (Booth & Ainscow, 2016; Travers et al., 2010; Ware et al., 2011). An immersion education observational schedule that was created for schools in the USA and Canada was also adapted to assess immersion education strategies (Fortune, 2014). The main areas of observation relate to the promotion and development of L2 learning for children with SEN, the use of assessment for inclusion, the role of the SNA/classroom assistant, and the inclusion of all students in activities outside of the classroom (see Table 3.4).

It was also anticipated that the pupils would be observed and photographed for one lesson in their class. These photographs would then be discussed with the pupil to find out about; how they learn, what ways they enjoy learning, and what makes learning difficult for them. However, during piloting this practice was deemed inappropriate as it caused too much disturbance in class and was subsequently omitted from the present study.

Table 3.4 An overview of the sections of the observational schedule used in the current research.

Section 1	Attends to continuous language growth and improves language accuracy.
Section 2	Makes language input comprehensible.
Section 3	Creates a second language rich learning environment.
Section 4	Uses teacher talk effectively.
Section 5	Promotes extended student output.

Section 6	Attends to diverse learner needs.
Section 7	Uses assessment to contribute to the achievement of all students.
Section 8	Class discipline is based on mutual respect.
Section 9	Special needs assistants/Classroom assistants for children with SEN support the learning and participation of students.
Section 10	All students take part in activities outside the classroom.

3.13 Ethical Considerations

Both stages of the research met the approval of the Dublin City University Research Ethics Committee. However, ethical approval for stage two of the present study was only granted when informed consent forms signed by the Board of Management of schools participating in the case studies were received by the college's ethics committee. Research could not be conducted prior to this (see Appendix B). These signed forms were acknowledged by the committee before the research commenced. Plain language letters and informed consent forms were sent to all participants for stage one and two of the study. These fully outlined the purpose of the study, what was expected of participants, and how confidentiality would be maintained. Participants were informed of their right to withdraw from the study at any stage without query (Cohen et al., 2013). Signed written consent was sought from schools for both stages of the research. Electronic informed consent was sought at the beginning of the online questionnaire and schools could not access the questionnaire without giving this consent. All pupils participating in stage two, were given a child friendly plain language statement (Appendix N) and a visual timetable of the activities involved in the research (Appendix T). The research process was explained to pupils before the study commenced to confirm that they fully understood what was involved. This was done in the presence of an adult from the school to promote transparency. Participants with SEN were consulted before each element of the research was conducted, as an ongoing

process to confirm that they were willing to continue. They were informed that they could withdraw or decline to participate at any stage. As per the DCYA guidelines, the signed parental consent form did not override the wishes of the child at any time (DCYA, 2012, p.3). All responses given throughout the research were anonymised, and are kept in a secure, locked location. Electronic data is stored on a password encrypted computer. All data is stored, in accordance with the Record Retention Schedule and Data Protection Guidelines of Dublin City University. The story books (containing photographs) created by the pupils participating in the present study are not presented in the data or appendices of the present study in order to preserve the anonymity of the participants and the schools. In line with the ethos of IM education all correspondence and activities were conducted through the medium of Irish. However, for validity purposes, English translations of some terminology were provided in the questionnaire to confirm understanding, for example, in questions using terminology for SEN classification. During the design process, every effort was made to safeguard against offensive, biased, and inconsiderate terms being used.

The researcher was aware of the power relations between her and the participants, and understood that those with SEN may be inherently vulnerable by virtue of their learning difficulties and/or diminished cognitive ability. This was an ethical consideration from the initial planning. Thus, all pupil interviews and activities were conducted in a school classroom, with an adult who works regularly with the pupil present (teacher, SNA, classroom assistant). During observations, the researcher was not alone with the pupils, a member of the school staff was always present. Garda vetting was obtained as per the DCU Policy for Garda Vetting of Students (DCU, 2015a). The ethical guidelines published by the Department of Children & Youth Affairs (DCYA, 2012), Research with children with disabilities: Guidelines and checklists for good practice (White, 2006) and the child protection guidelines of DCU (DCU, 2015b) were followed at all times.

3.14 Credibility, Reliability, Validity, & Generalisability

For this study to be trustworthy, credible, valid, and reliable, it was important for the researcher to take account of her personal biases, which could influence methodologies and findings (Noble & Smith, 2015). The researcher was educated in IM primary and post-primary schools in the RoI and taught for many years in IM mainstream schools. Several measures were implemented to enable the researcher to report the viewpoints and perspectives of participants clearly and accurately. Consistency was maintained, throughout the research process by following the clear and transparent description of the methodologies as outlined previously. Record keeping was one method used to monitor personal bias and a reflective journal was maintained throughout the study. This journal documented the rationale as to how and why design and analysis decisions were made (Primeau, 2003; Rolfe, 2006). Furthermore, it reinforced the relevance of the data collected and analysis methods used. This process meant that all decisions made were consistent and transparent, thus enhancing the reliability of the present study. Debriefing sessions with research supervisors safeguarded against biases impacting on the research process and findings (Houghton et al., 2013; Merriam, 1998). Themes generated in the findings were discussed with supervisors who have much expertise in quantitative and qualitative research.

In stage one, the external validity of the findings was reinforced through the use of a proportionate randomised stratified sample. The construct validity of the questionnaire was achieved as items were developed using the literature reviewed in Chapter 2 and piloting (Heale & Twycross, 2015). As mentioned previously, the questionnaire was piloted and adapted based on recommendations made. Within this process, criterion validity was maintained through the comparison of the content of the present study with that of previous research in this area (Heale & Twycross, 2015). Prior to commencing stage two, construct validity was sought through piloting the observation schedule and interview questions to establish appropriateness (Houghton et al., 2013; Robson & McCartan, 2016). Adaptations were made as appropriate following this process. The content of interviews with

pupils and adults in the study was influenced by previous research in this area, and the literature reviewed (see Chapter 2). Throughout the semi-structured interview process, interviews were recorded and transcribed. This allowed for the data gathered to be revisited many times, and to detect for emerging themes. Thematic analysis was used to enhance the reliability of the findings generated, as codes were created to describe the data (Cohen et al., 2013; Robson & McCartan, 2016). Furthermore, the data gathered in this stage was triangulated with the findings of stage one, to reinforce credibility (Casey & Murphy, 2009; Houghton et al., 2013). This method allowed for similarities and differences to be identified, and for different perspectives to be represented. A 'thick' description of the context in which the case studies took place is provided in the findings, to enable readers to decide whether the findings are transferable to other situations (Graneheim & Lundman, 2004; Leung, 2015; Stake, 1995). A rich verbatim of a range of participant responses are provided to support findings (Cohen et al., 2013). Generalisability involves the extent to which findings generated can be applied to a different setting (Leung, 2015). The transferability and applicability of the data gathered to other contexts is enhanced through the multiple case study design used. Furthermore, the triangulation of data from several sources and empirical evidence, adds to the consistency, credibility, and reliability of the study (Leung, 2015; Merriam, 1998).

3.15 Conclusion

In this chapter mixed methods, quantitative, and qualitative research were described as these were the methods used in the present study. The epistemological and ontological underpinnings of this research were also discussed. Following on from this, the methods of participant recruitment, the participant profiles, and the research methods employed in stage one and two were described. The ethical considerations of the study were provided along with an overview of the validity and reliability of the research methods used. In the following two chapters, the results of the quantitative and qualitative research are discussed.

4.1 Introduction

Results of the survey undertaken in the first stage of the present study are reviewed in this chapter. An overview of the data analysis method used is also be provided. The profile of those who completed the questionnaire and the sample size studied is analysed. Prevalence rates for pupils with SEN in IM schools, the number of pupils accessing additional teaching support, and how pupils are selected for this additional teaching support are discussed. Along with this, the educational practices in place in IM schools to meet the needs of these pupils and the challenges encountered when doing so are investigated. Finally, the number if pupils with SEN who transferred from IM education from September 2014-2017 and the reasons for these tranfers are investigated.

4.2 Data Analysis

Quantitative data responses were analysed using the Statistical Package for Social Sciences (SPSS). This enabled the examination of quantitative data in terms of descriptive statistics and frequencies. Data was analysed in terms of percentages, averages, mean, mode, maximum value, minimum value, and range. Qualitative responses to open ended questions were analysed using thematic analysis (Braun & Clarke, 2006). Thematic analysis is discussed in further detail in Chapter 5. Responses to these questions and additional comments provided in the questionnaire were given in Irish. These were translated from Irish to English for the presentation of data/findings in this chapter.

4.3 The Profile of Questionnaire Respondents

As mentioned previously, this stage included a proportionate randomised stratified sample (20%, N=29) of primary IM schools in the RoI, for the academic school year 2017/2018. From the cohort studied, 55.17% (n=16) of the online surveys were completed by the school principal, 41.37% (n=12) by a special education teacher, and 3.44% (n=1) by both the principal and special education teacher. The mean number of years' teaching experience for respondents was 23. As is evident in Figure 4.1, over half (56.61%, n=16) of those who answered the questionnaire on behalf of their school had more than 26 years of teaching experience, and just under three quarters (73.26%, n=22) had more than 16 years of teaching experience. None had less than 6 years teaching experience in total. Principals who completed the questionnaire had more experience in their position (mean 17.64 years) than the special education teachers (mean 7.53). For example, three principals (17.64%) had over 30 years' experience in their role while only one special education teacher (7.69%) had over 15 years' experience. A decade ago, Nic Gabhann (2008) found that 52% (N=68) of special education teachers had more than 15 years' experience compared to one participant in this study. The decline in the number of teachers with a high level of experience may be due to the increase in the number of new IM schools established. Another reason for this may be an increase in the number of teachers who have retired from primary school teaching due to pension incentives. Along with this, there has been an increase in the number of new special education teacher posts sanctioned under Circular 0013/2017 (DES, 2017a). In total 29 school principals, 294 mainstream class teachers, 83 full-time special education teachers, 23 part-time special education teachers, 2 special class teachers, and 68 SNAs were employed in the sample studied.

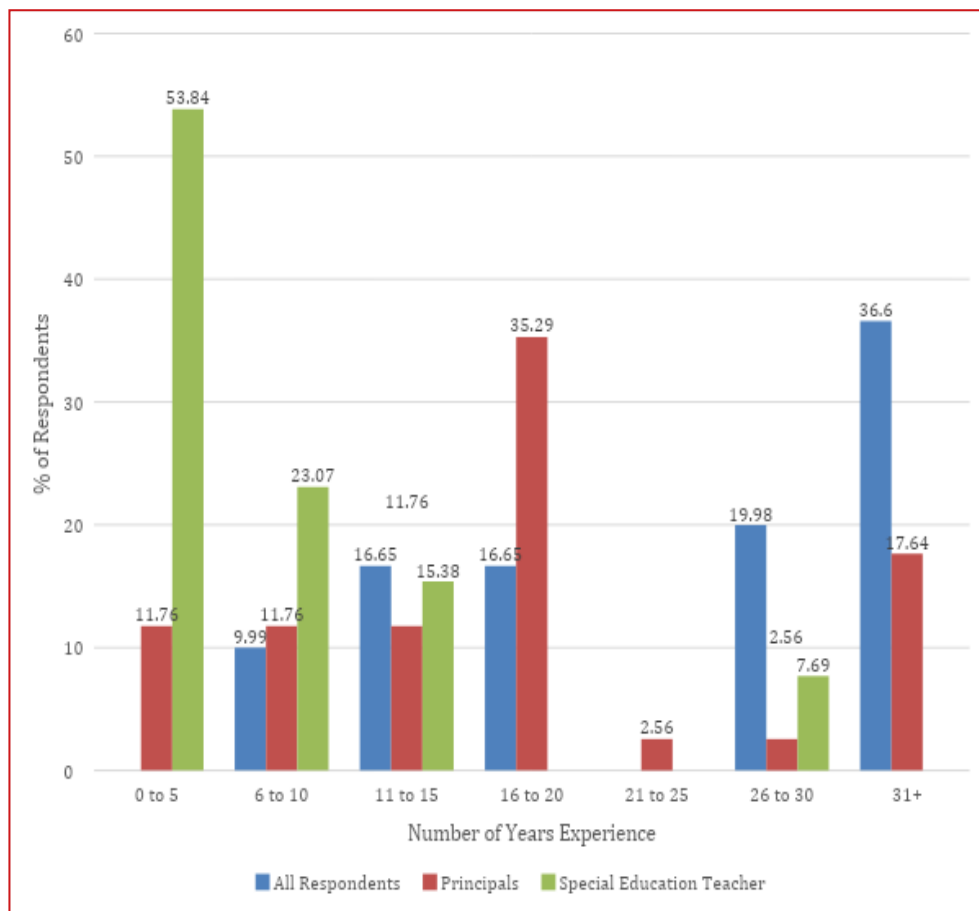


Figure 4. 1 The teaching experience of respondents completing the online survey on behalf of their school (N=30).

4.4 Sample Size

The schools who participated in this stage had an enrolment of 7,494 pupils. The gender breakdown of participants showed that 3,683 boys and 3,756 girls were enrolled in schools. There was no statistical significance between the number of boys and girls included in the study (correlation score: 0.98334). The

smallest school that participated had 31 pupils enrolled and the largest school had 540 pupils (mean:258.41). The smallest number of boys in a school (N=17) is slightly higher than that for girls (N=12). The maximum number of girls in a school studied (N=248: mean 129.52) was slightly higher than that for boys (N=240; mean 125.45). The mean enrolment for schools included in the study was 258.41 pupils.

4.5 Overall SEN Prevalence Rates

An overall SEN prevalence rate of 9.40% (N=705) was generated for this sample (N=7,494 pupils enrolled). In the context of the RoI, the figure generated by the present study is much lower than that of 27.8% (N=2,381) for 9-year old pupils in all school types by Cosgrove et al. (2014), and 25% by Banks & McCoy (2011) for all primary school children throughout the RoI. Both studies undertook an analysis of data gathered from the GUI study (N=8,578). For the study by Cosgrove et al. (2014), pupils in 12 categories of SEN were investigated in relation to SEN frequency. This was done through an analysis of the cohort from the first wave of the GUI study, data from teachers and parents completing the Strengths and Difficulties Questionnaire, and data gathered from qualitative interviews (see Cosgrove et al., 2014, p. 36 - 39 for further details). There are differences in the methodology and categories of SEN listed in the present study and that of Cosgrove et al. (2014) and Banks and McCoy (2011), this needs to be taken into consideration when making comparisons. For example, the categories of EBD and ADHD are combined in the data in the Cosgrove et al. (2014) study.

As shown in Figure 4.2, when compared to previous research on IM schools, this rate is higher than that of 7.9% quoted in earlier research for the RoI (Nic Gabhann, 2008). The rate by Nic Gabhann (2008) came from a larger sample (N=12,829) however, the cohort of 7,494 in the present study is large enough to confirm statistical significance. Thus, the comparison in prevalence rates cannot be attributed to the number of responses alone. Therefore, it

can be suggested that there has been an increase in the prevalence of SEN in IM schools in the RoI over the last decade. This could be due to advances in diagnostic materials and the broadening of SEN categories. Another factor may be that traditionally there has been a practice of withdrawing pupils with SEN from IM schools. However, more information on the suitability of this form of education and bilingualism for these pupils has become available recently and therefore this may also have had a positive impact on pupil retention rates. This figure is also higher than the figure of 4% for pupils (N=517) with a statement of need (diagnosis of SEN) in IM preschool, primary, and post-primary schools in NI (Ní Chinnéide, 2009).

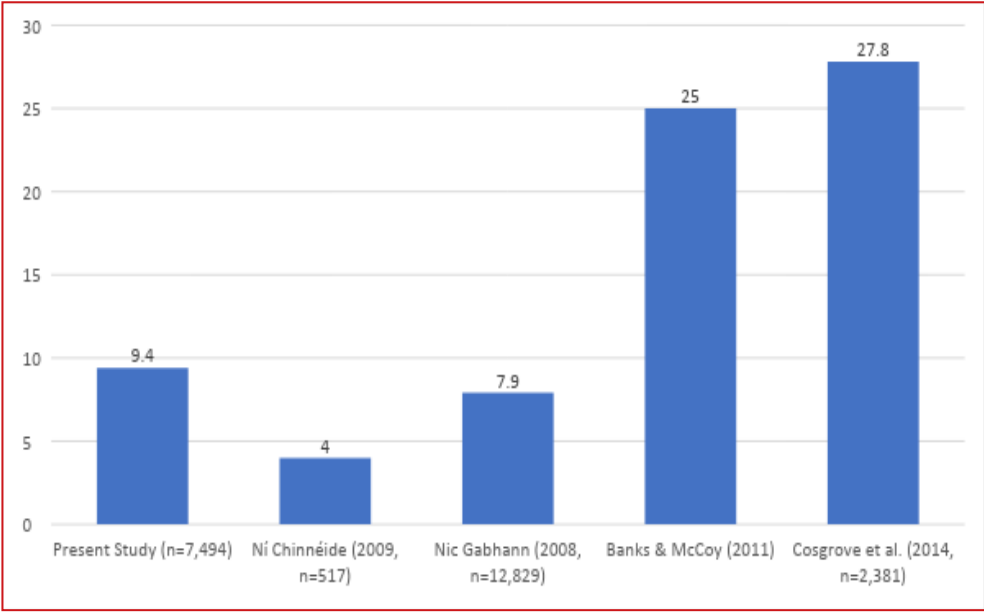


Figure 4.2 A comparison of prevalence rates percentages of SEN in Irish primary schools.

4.6 SEN Prevalence by School Location & Size

When the prevalence of SEN in IM schools is analysed by school type, schools in areas of low SES reported a lower prevalence rate (6.35%) of pupils with

SEN than the other school types (see Figure 4.3). This finding contrasts with those of national and international research, as research states that children in areas of low SES are disproportionately represented with SEN (Banks et al., 2012; DEUK, 2018; Drudy & Kinsella, 2009). When comparing findings, it is important to consider that this rate may be lower because the co-morbidity of disorders has not been estimated in this study. When the data is further analysed by school type, it is not surprising that the school with special classes for pupils with SEN is listed as having the highest prevalence rate (16%). There are more pupils with SEN reported in small town schools (<203 pupils) with teaching principals (12.77%) than urban schools of the same size (1.96%). This finding may be limited by the fact that the urban school studied was only newly established and did not have a full complement of classes. There are more pupils with SEN reported in urban schools with 203-410 pupils (12.16%) than in small town schools with the same number of pupils (9.46%). Yet in the larger schools (>411 pupils) in both these areas it is the reverse, with the small-town schools having a higher proportion of pupils with SEN (9.9%) than the urban schools (5.01%).

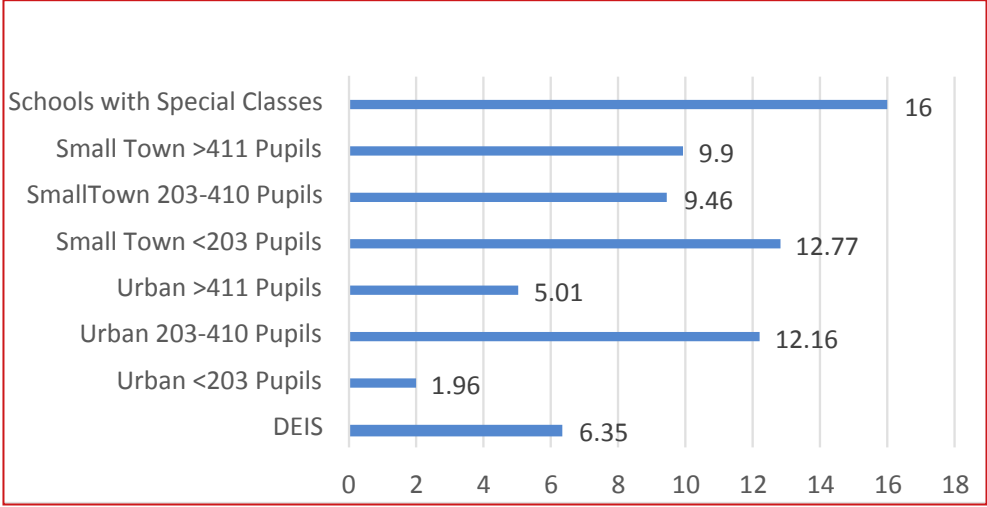


Figure 4.3 The percentage of SEN prevalence by school size and location.

4.7 SEN Prevalence by Geographical Location

SEN prevalence rates in schools (N=29) was also analysed by the categories of small towns (population 1,500 – 10,000), large towns (population 10,000+), and cities (Dublin, Cork, Waterford, Kilkenny, Galway). It was found that IM schools in cities (N=11, 3,237 pupils) presented with a lower prevalence rate of SEN (7.47%, N=242) than IM schools in small towns and large towns (see Figure 4.4). Small town schools (N=9, 1,859 pupils) had a rate of 11.29% (N=210), which is slightly higher than that of 9.82% (N=236) for large town schools (N=9, 2,402 pupils). When compared to the national figures for these areas (see Figure 4.4), the rates for IM schools are lower than those established for all school types (Cosgrove et al., 2014).

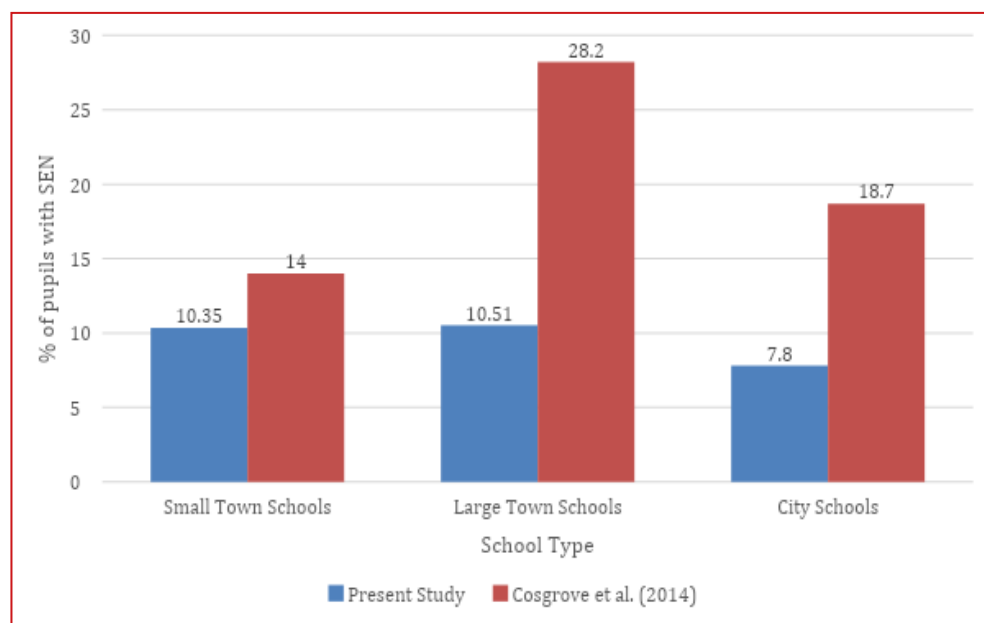


Figure 4. 4 A comparison of SEN prevalence rates (%) in schools from the present study and the findings of Cosgrove et al. (2014).

4.8 SEN Prevalence by Category in IM Schools in the RoI

As shown in Figure 4.5, dyslexia (26.52%) is the most frequently reported subgroup of SEN in the schools studied. ASD (14.18%) is listed second, dyspraxia (14.04%) is third, EBD (8.93%) is fourth, and SSLD (7.37%) is fifth. It is important to note that there is only one pupil in the difference between the category of ASD and dyspraxia. Other categories listed include attention deficit hyperactivity disorder (ADHD, 5.67%), assessed syndromes (4.53%), mild GLD (4.53%), physical impairment (3.4%), hearing impairment (1.98%), moderate GLD (1.84%), multiple disabilities (1.7%), visual impairments (1.56%), and severe emotional disturbance (1.13%).

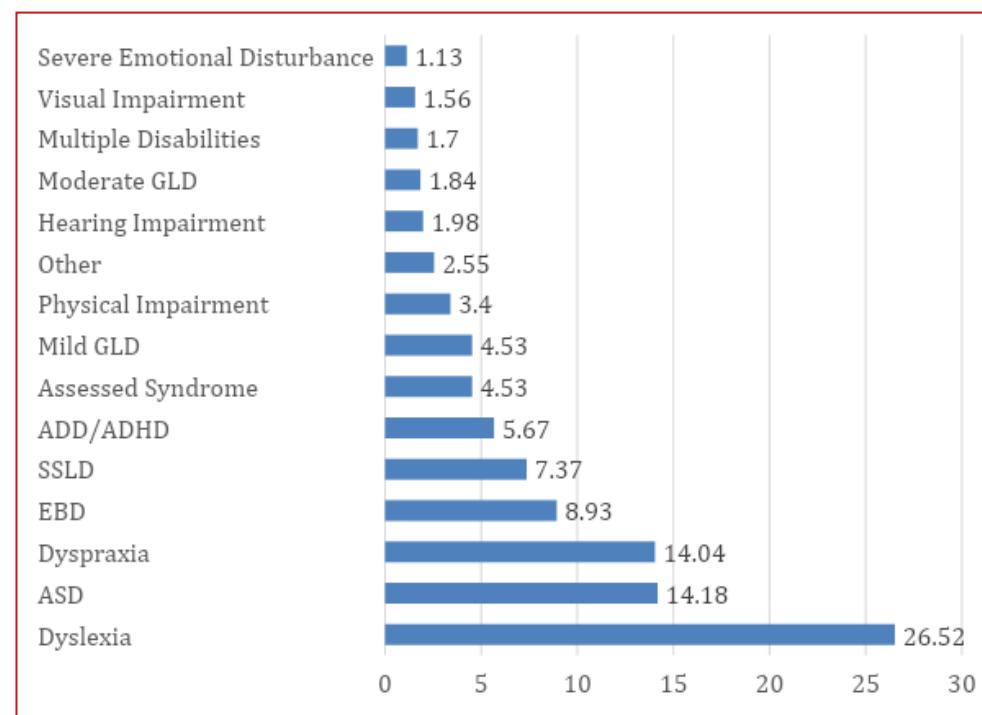


Figure 4. 5 The prevalence of SEN (%) in IM schools by category (N=705).

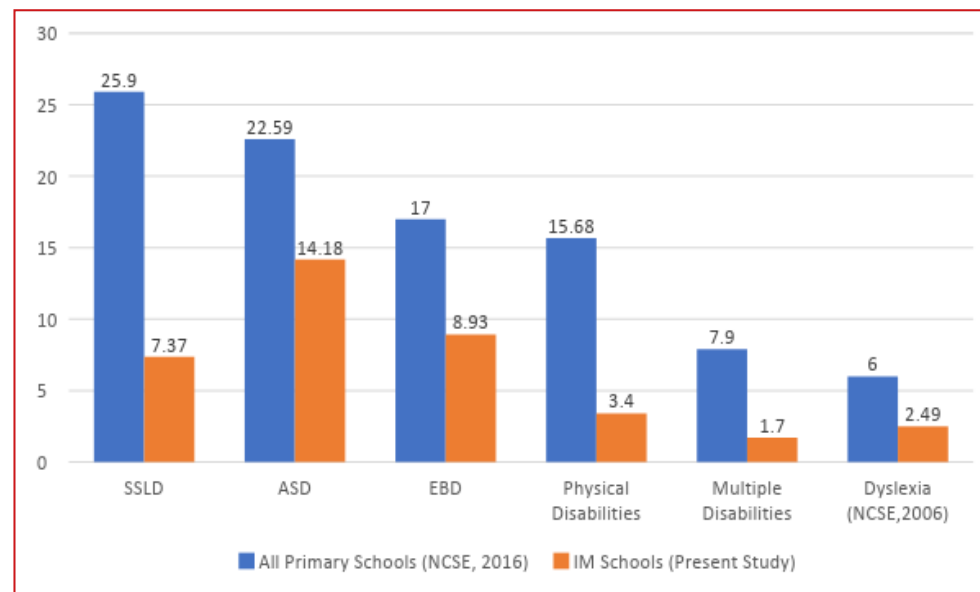
4.9 Categories of SEN in IM schools & All Primary School Types (RoI)

When the SEN of pupils in IM schools is compared to the data available for pupils diagnosed and in receipt of additional teaching support in all primary schools in the RoI (NCSE, 2016), it is evident that there is a difference in the most frequently reported sub-groups (see Figure 4.6). It is reported that SSLD (25.90%, n=7,437) is the most frequently reported sub-group for all primary schools (NCSE, 2016). This category is listed fifth in all studies on IM schools only, with a rate of 7.37% in the present study. Similarly, ASD is listed second (22.59%, n=6,487) in all primary schools (NCSE, 2016) and in this study. However, the prevalence rate generated in the present study (14.18%) is lower than that for all school types (22.59%, Cosgrove et al., 2014). EBD is listed third (17%, n=5074) in all primary schools (NCSE, 2016), and fourth in the present study (8.93%). More pupils are presenting in all primary schools with physical disabilities (NCSE, 2016, 15.68%, n=4,504) than in IM schools in this study (3.4%). This is also the case when the percentage of pupils with multiple disabilities is compared. There are 1.7% of pupils in IM schools presenting with multiple disabilities, and 7.91% (n=2,272) in all primary schools. The number of pupils presenting with dyslexia in this study (N=187) represents 2.49% of the IM school population studied. The percentage of pupils in IM schools with dyslexia is much lower than those estimated for all primary schools in other research. For example, the Dyslexia Task Force (2001) estimated a figure of 8% (DES, 2001). While the Dyslexia Association of Ireland (2017) propose a 10% prevalence rate.

Figure 4. 6 A comparison of the SEN prevalence rates (%) in IM schools and all primary schools in the RoI.

4.10 A Comparison of SEN Categories in IM primary Schools

It is evident that as per the earlier studies in the RoI (Nic Gabhann, 2008; Barrett, 2016) dyslexia is still the most frequently reported subgroup of SEN (see Figure



4.7). However, the results of the present study show that the rate of 26.52% is slightly lower than that of 29.9% and 30.9% previously established (Barrett, 2016; Ní Chinnéide, 2009). Speech and language disorders remain listed as the fifth most prevalent group as per previous studies, with a rate of 7.37% in this study and of 8.6% in the most recent study by Barrett (2016). There is a positive correlation between the findings of the present study and those of Barrett (2016) for the top eight most frequently reported sub-groups of SEN (see Figure 4.7). The findings of the earlier study by Nic Gabhann (2008) show no correlation with the results of this study or that of Barrett (2016), in relation to groups of dyspraxia, ASD, EBD, mild/moderate GLD, attention deficit disorder (ADD), and ADHD. The timeframe between the studies, advances in child diagnosis, and a deeper understanding of the definition of SEN categories may be a factor for the lack of correlation in this instance. The present study and that of Barrett (2016) suggest that there has been an increase in the number of pupils presenting with dyspraxia (developmental co-ordination delay) over the last decade. ASD is also listed second in both studies in comparison to ninth (3%) in the earlier

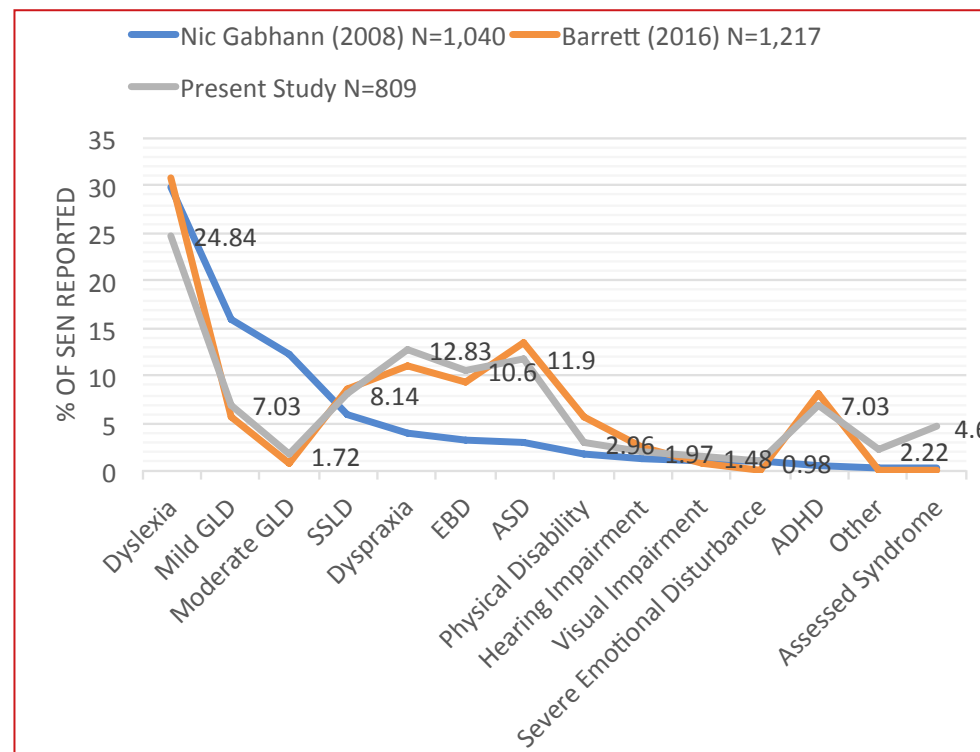
study by Nic Gabhann (2008). EBD which is listed fourth in this study and that of Barrett's, was previously listed seventh (3.20%) in a study ten years ago (Nic Gabhann, 2008). The number of pupils presenting with ADD/ADHD has also risen over this time, from 14th (0.5%, Nic Gabhann, 2008) to sixth in the more recent studies (Barrett, 2016, 8.2%; Present study, 5.67%). There has been a decrease in the number of pupils presenting with mild or moderate GLD over the last decade. This may be due to a change in the criteria for the allocation of additional teaching supports. Pupils no longer need a diagnosis of GLD to access supports (DES, 2017a). It is therefore clear, that the needs of pupils in IM schools in the RoI have changed over the last decade. With conditions, such as, ASD, developmental co-ordination delay (dyspraxia), EBD, and ADHD becoming more prevalent and the number of pupils with GLD is decreasing.

Figure 4. 7 A comparison of the distribution of SEN sub-groups in research by Nic Gabhann (2008), Barrett (2016), and the present study.

When the findings of the present study are compared to those of research undertaken in IM schools in NI (Ní Chinnéide, 2009), there is a difference in the needs of the pupils in both jurisdictions. Dyslexia was listed schools in NI as the fifth most prevalent sub-group, with only 6% of pupils (n=431) (Ní Chinnéide, 2009). This category has been listed first in all studies in the RoI. Speech and language difficulties were listed fourth (8%), and ASD listed sixth (5%). The most prominent subgroups listed in NI are moderate learning difficulties (32%), which equates to mild GLD in the RoI and mild learning difficulties which equates to borderline mild GLD in the RoI. These categories have much lower prevalence rates in the findings of the present study. Nevertheless, it is important to note that the study by Ní Chinnéide (2009) was undertaken almost a decade ago.

4.11 SEN Prevalence by Class

When SEN prevalence is analysed by class grouping (see Figure 4.8), there is a higher distribution of SEN among the senior classes (3rd Class – 6th Class)



than the junior classes (Junior Infants – 2nd Class). Almost all (65.53%, n=462) of the SEN reported are in the senior classes, with the remainder (34.46%, n=243) reported in the junior classes. Findings show that only slightly over ten percent (12.05%, n=85) of SEN were diagnosed by the beginning of 1st class. These findings suggest that most pupils in these schools may not be assessed or diagnosed until the senior years of their schooling. This could be due to several factors, such as limited access to assessment services, the delayed introduction of English reading due to immersion practices, and the lack of appropriate assessment resources through the medium of Irish. In NI, schools reported more pupils in junior infants (10%, n=49) on the SEN register and a steady increase of pupils across the other classes (Ní Chinnéide, 2009, see Figure 4.8). However, it is important to remember that not all pupils listed on the register would have a diagnosis of SEN (Ní Chinnéide, 2009, p. 119).

Like this study, findings from the UK also show that the number of pupils with a diagnosis of SEN (statement of need) increases by age up until 15 years old. For the academic year 2017/2018 there were 14.5% of pupils aged 10 with a statement in the UK. These children would be in the equivalent of 4th class/year 6. This is similar to the findings for this study, as 14.89% of pupils in 4th class were reported with a diagnosis of SEN (DEUK, 2018).

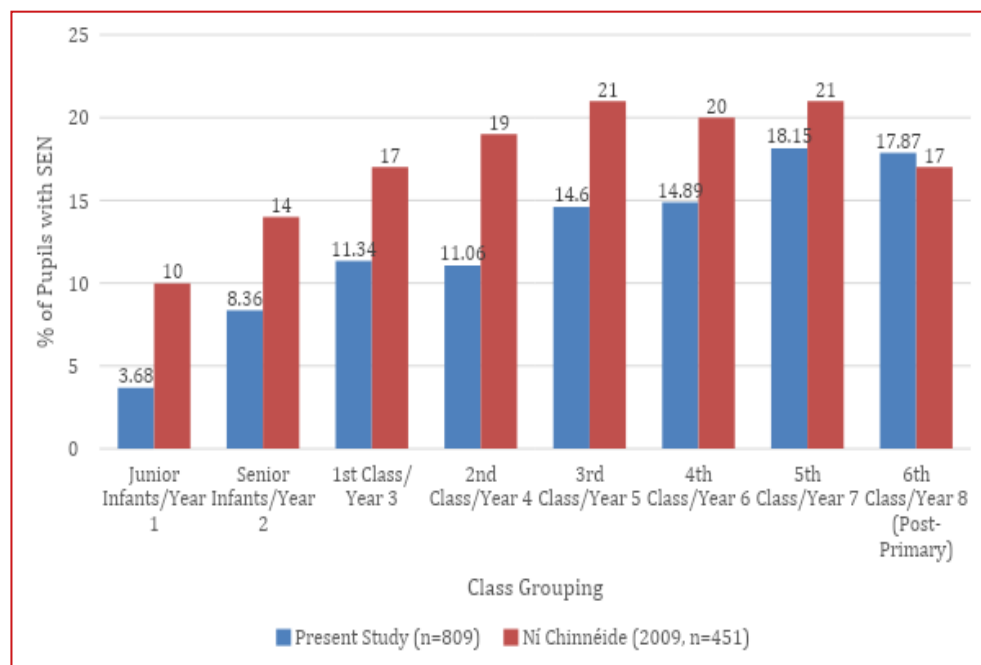


Figure 4. 8 A comparison of the distribution of SEN by class groupings in IM schools in the Republic of Ireland and Northern Ireland.

4.12 The Five Most Frequently Reported Sub-groups of SEN by Class

When the five most frequently reported sub-groups are analysed by class (see Figure 4.9), dyslexia (N=187) is least prevalent in the junior classes with no cases reported in Junior Infants, and only 3.38% (N=2) reported in Senior Infants. For this category, the number of cases reported increases significantly

year by year from 1st class (11.25%, N=19) to 5th class (38.28%, N=49). We then see a decrease in the prevalence of this category in 6th class (29.36%, N=37). The prevalence rate of ASD (N=100) is highest in the junior classes, with the highest proportion of pupils enrolled in junior infants (23.07%). The senior classes have lower prevalence rates with no class reporting more than 14.28% of pupils with ASD. For the third most frequently reported sub-group, dyspraxia (N=99), there is a relatively equal distribution of pupils in the middle classes (1st class, 11.76%, N=12 to 6th class, 17.26%, N=24). More pupils are reported with this condition in senior infants (16.92%, N=11) and 6th class (17.26%, N=24), and no pupils were reported in junior infants. EBD is most prevalent in the junior classes (junior infants, 12%; senior infants, 11%; 1st class, 22.5%). The distribution of EBD among the senior classes (2nd – 6th class) is lower, ranging from 7.69% (N=6) in 2nd class, 3.8% (N=4) in 4th class, and 5.55% (N=7) in 6th class. SSLLD is also most prevalent from junior infants to 1st class, with a prevalence rate of 27% (N=7) for junior infants. Much lower rates for this category are reported for the senior classes, with 1.56% (N=2) reported for 5th class, and 0.79% (N=1) for 6th class. These findings compare with those for the UK, which show that ASD and speech, language and communication needs are more frequently reported in the junior classes. Similar to this study, in the UK, the Department for Education (DEUK, 2018) reported that the highest number of pupils with ASD were aged 4 (36.2%). Also, similarly, they found that the number of pupils with speech, language and communication needs decreases from the age of 3 onwards and that specific learning difficulties such as dyslexia is more prevalent in older pupils (26% of 15-year olds compared to 10.74% of 7-year olds).

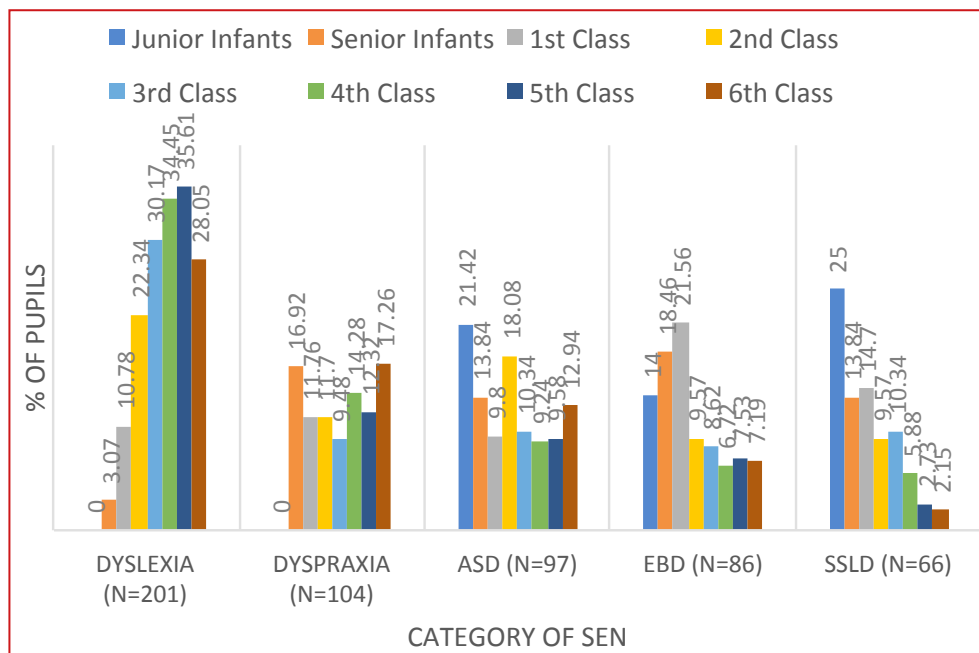


Figure 4. 9 Comparison of the distribution of the five most reported sub-groups of SEN across class groupings.

4.13 Pupils Receiving Additional Support from the Special Education Teacher

In total it was reported that 1,242 pupils were receiving additional teaching support from the special education teacher. These pupils represent 16.57% of the total number of pupils enrolled in schools (N=7,494). This figure is higher than that of 13% (N=1,719) estimated previously by Nic Gabhann (2008) for IM schools in the RoI. However, the percentage of pupils receiving support in this study (16.57%), is similar to that of 17% generated for pupils who were receiving additional teaching support under the GAM in all primary schools in the RoI (Banks & McCoy, 2011) and in IM primary schools in NI (17%, n=431, Ní Chinnéide, 2009). Hence, this comparison shows that there is little difference in the number of pupils receiving support in IM and English-medium schools.

4.14 Assessment Methods for the Selection of Pupils for Additional Support

All schools stated that they used teacher observation to select pupils for additional support (see Figure 4.10). Barrett (2016, 93.3%, n=70) found that similar to the present research (100%, N=29), observation was the primary method of selection used by almost all schools to assess and select pupils for additional support. This shows an increase in the number of schools using observation over the last ten years, as this method was previously listed as the third most used strategy a decade ago (Nic Gabhann, 2008). Interestingly, only 89.66% of schools (n=26) reported that they used standardised assessments in Irish literacy and educational psychological assessments to select pupils. One of the schools who did not use standardised Irish literacy assessment to select pupils (n=3), stated in an open-ended question that they do not provide additional support for Irish literacy. In comparison, in 2007/2008 schools reported that standardised test results were the tool used most frequently to select pupils (Nic Gabhann, 2008). Most schools in the present study (82.76%, n=24) use the scores of standardised tests in mathematics through Irish and diagnostic assessments to evaluate pupils' abilities. When compared to the results of the study by Nic Gabhann (2008, 58%, n=36) it is evident that more schools are now assessing pupils' mathematical abilities through Irish (82.76%, n=24). Norm referenced assessments were used by over half (68.97%, n=20) of the schools surveyed, this finding is lower than that of 93.3% (n=70) established in 2016 (Barrett, 2016). School based assessments were created and implemented to select pupils by 58.62% (n=17) of schools. Whilst, less than half of schools surveyed (37.93%, n=11) reported using dyslexia screening tests. This percentage is lower than that of 62.7% (n=47) established previously (Barrett, 2016). Differences may be evident between the findings of the present study and that of Barrett (2016) due to differences in the sampling methods used.

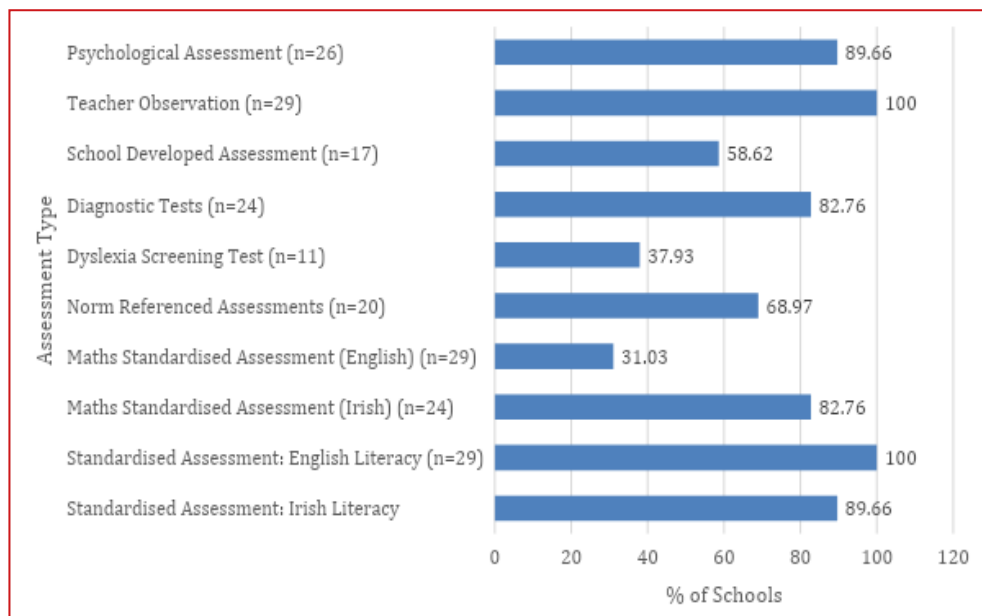


Figure 4. 10 The assessment methods used by schools in the present study for the selection of pupils for additional teaching support.

4.15 Pupils under the Supervision of a Special Needs Assistant (SNA)

There were 68 SNAs employed in the schools surveyed (N=29). Five of the schools had no SNAs employed to work with pupils who have SEN. Most schools had one (28%, n=8) or two (24%, n=7) SNAs. Other schools had three (10.34%, n=3), four (6.89%, n=2), or five (13.79%, n=4) SNAs employed. However, the school with a special class had nine. On average schools had two SNAs. The highest number of pupils in a school receiving support from an SNA was 20, with the lowest being one pupil. Of those reported with SEN in schools, 15.9% (n=129) were under the supervision and care of an SNA. This equates to 1.72% of the overall cohort studied (N=7,494). For the academic school year 2016/2017, 1.96% (n=18,513) of pupils in all school types including Post-Leaving Certificate courses, in the RoI had access to an SNA (NCSE, 2017). This figure is slightly higher than that for pupils in IM schools in the present study (1.72%).

4.16 Cut-Off Points on Standardised Tests for the Selection of Pupils for Additional Teaching Support

Schools were asked what was the cut-off point they used on standardised assessments to select pupils for additional support from the special education teacher. Most schools (64%, n=16) used a STen score of four in English literacy assessments, as per the guidance of circular 013/2017 to select pupils for additional teaching support. Other schools (32%, n=8) used a score of three, and one school (5%) used a STen score of up to five to select pupils. For Irish literacy assessments, most schools (n=10) also used a STen of four to select pupils. However, for this form of assessment, some schools used a score of five or lower (15.78%, n=3), and one school stated that they selected pupils with a score below a STen of six (5.26%, n=1). In the subject area of mathematics, schools administered the tests through Irish (n=27) and English (n=7). For the tests administered through Irish, over half of schools (59.25%, n=16) used a score of four and below for the selection process. A score of three and lower was used by 33.33% (n=9) of schools, a small number of schools used a score of five (3.7%, n=1) and six (3.7%, n=1). Schools who administered these tests through English (n=7) did not use the higher scores of five and six to select pupils. Most (85.71%, n=6) used a score of four and under, and the remaining school used a score of below three (14.28%, n=1).

4.17 Gender Breakdown of the Pupils Receiving Additional Teaching Support

There were no single sex schools included in the study, all were mixed gender. More boys 55.55% (n=690) than girls 44.45% (n=572) were reported as receiving additional teaching support from the special education teacher. However, there was no statistical significance between these two groups (correlation score: 0.94515). Figure 4.11 shows the distribution of boys and girls receiving this support in schools. No school (N=29) reported that the special education teacher's caseload was made up of less than 40% boys, compared to 27.58% (n=8) of schools having less than

40% of girls on their caseload. No school reported having more than 60% of girls on their caseload, while in 31.03% (n=9) of schools' caseloads consisted of over 60% of boys. This is consistent with national and international research, suggests that boys are disproportionately represented with SEN (Banks et al., 2012; Cosgrove et al., 2014; DEUK, 2018; Drudy & Kinsella, 2009; Ní Chinnéide, 2009).

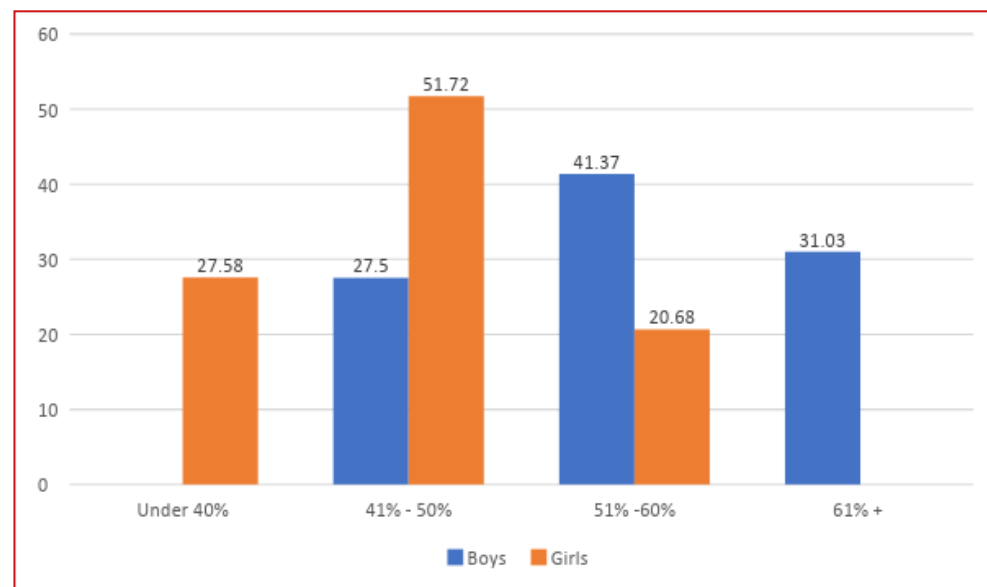


Figure 4.11 The percentage of boys (N=690) and girls (N=572) receiving additional teaching support from the special education teacher in IM schools (N=29).

4.18 Pupils Attending the Special Education Teacher

Of the total enrolment in the schools participating in the present study (N=7,494), 4.83% of pupils without a diagnosis of SEN were receiving additional teaching support from the special education teacher. In 20.68% (n=6) of schools, up to ten percent of pupils were attending additional teaching support. As is shown in Figure 4.12, over half (65.5%, n=19) of schools have 20% or less of their pupils attending additional support. Just over a tenth (13.77%, n=4) of schools reported having more than 26% of their students accessing additional teaching support.

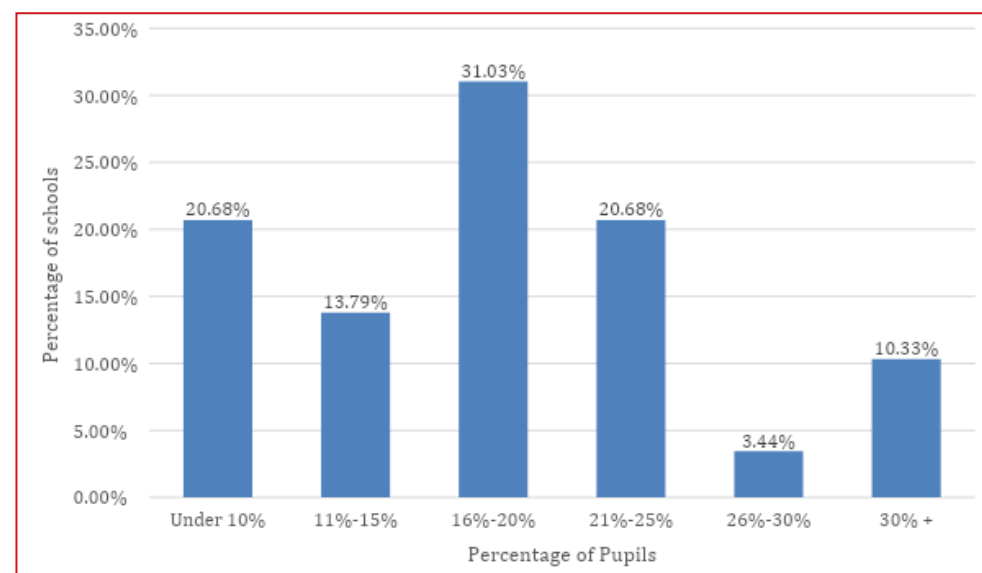


Figure 4.12 The percentage of pupils attending the special education teacher for additional teaching support in schools.

4.19 The Educational Practices Used to Meet the Needs of Pupils with SEN

Schools were asked how often they used the practices listed in Figure 4.13 for providing additional support to pupils with SEN. Not all schools responded to all categories. As is evident, the practice of pupil withdrawal from the classroom is most frequently used. Daily, schools (N=24) used the practice of one to one pupil withdrawal (70.83%), group withdrawal (69.23%), and the withdrawal of pairs (47.83%). The practice of using pupil withdrawal was also most frequently reported in previous research on IM and English-medium primary schools (Barrett, 2016; Kinsella et al., 2014; Rose et al., 2015; Shiel et al., 2011; Travers et al., 2010). In class support (co-teaching) was used by less than half (42.3%) of schools (N=26) daily, while in class small group work was used by just over half (52%) of schools (N=25) daily. It was also found that in class support was implemented more frequently in larger schools than small schools similar to the findings of Barrett (2016).

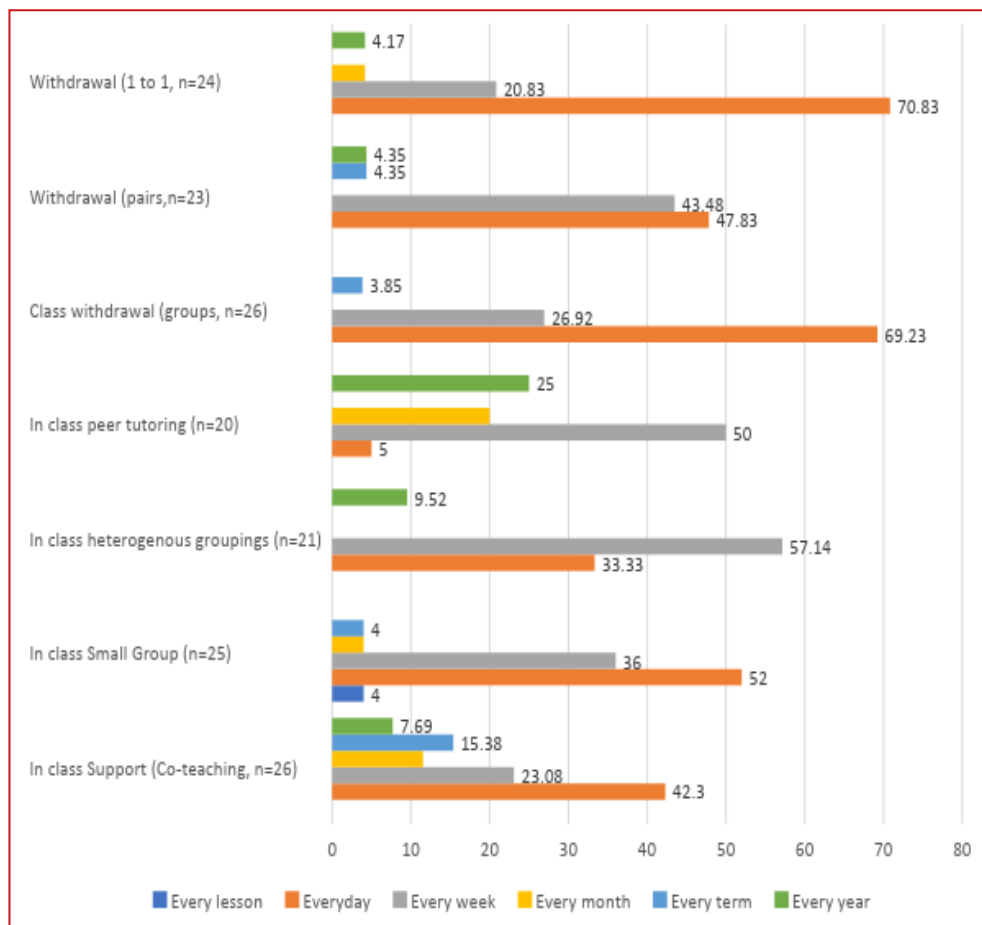


Figure 4. 13 The practices implemented by schools when providing additional teaching support to pupils with SEN.

4.20 Teaching Strategies Used in Schools

All schools (N=29) implemented Individual Education Plans (IEPs) for pupils with SEN. This figure shows a small increase in the number of schools using IEPs, when compared to the finding of just over 90% in previous research (Barrett, 2016, Nic Gabhann, 2008). Other strategies used by schools included student reflective journals (51.72%), project work (51.72%), use of DVD/video/TV/

recordings (51.72%), ICT/Internet (58.62%), practical activities, student self-assessment (58.62%), reflective learning (55.17%), problem-based learning (55.17%), and the use of cameras (51.72%).

4.21 Access to External Services

Through an open-ended question, schools were asked what services they require to meet the needs of pupils with SEN that are currently unavailable to them. Of the schools that responded to this question (n=23), almost half (47.82%, n=11) said that they need more access to external services in general, such as, the educational psychologist, occupational therapist, and the speech and language therapist. Almost a fifth (17.39%, n=4) stated the need for additional support for the Irish language through a classroom assistant. The availability of external services through the medium of Irish, for example, those of the speech and language therapist and the educational psychologist was referenced to as a need by 21.73% (n=5) of respondents. With a further 8.69% (n=2) of schools stating the need for these external service providers to understand IM education. The need for assessments through Irish was also referenced by 21.73% (n=5) of schools. Participants were also asked about the availability of external services through the medium of Irish through a multiple-choice question. Most services were only available through the medium of English, with no support services through the medium of Irish available for the behavioural support service, physiotherapists, occupational therapists, and speech and language therapists. The only services available through Irish to some schools were that of the educational psychologist (10.34%, n=3) and play therapist (4.76%, n=1). Some schools reported that Irish and English were used by medical practitioners (20%, n=5), educational welfare officers (5%, n=1), and educational psychologists (17.24%, n=5). When the availability of services to these schools was examined, one school had requested the services of a speech and language therapist, but this service was unavailable to them. Two schools (6.89%) also reported that the visiting teacher service provided by the Department of Education and Skills is only available to them through English.

4.22 The Challenges Faced by IM Schools

Schools were asked whether they found the factors listed in Figure 4.14, very challenging, challenging, somewhat challenging, or never a challenge. Not all respondents answered all questions. All schools (N=29) found accessing assessment materials through the medium of Irish, and not having enough time to work with pupils who have SEN, as challenging on some level. Lack of external services through the medium of Irish was challenging on some level for almost all schools (n=28). Over two thirds of schools (n=23) found sourcing substitute teachers with Irish challenging. Most schools found class size (93.10%, n=27) as a challenge on some level. Less than half of schools reported this factor as very challenging (44.82%, n=13). The lack of support from home for pupils with SEN was listed a challenge by 82.75% (n=24) of schools, however, only 13.79% (n=4) of schools found this very challenging, and almost half of the schools (44.82%, n=13) who responded to this question found this aspect only somewhat challenging. A lower percentage of schools (58.62%, n=17) found a lack of Irish language proficiency at home as a challenge, with most schools (24.13%, n=7) stating that this was somewhat challenging. This finding is lower than that of 62.5% (n=40) established by Barrett (2016). This finding corresponds with international research that found that a parent's lack of proficiency in the school's language of instruction is a challenge for parental involvement (Kavanagh & Hickey, 2013; Ní Thuairisg & Ó Duibhir, 2016; Tinkler, 2002). In relation to classroom instruction and practices, the lack of suitable resources through the medium of Irish was a challenge for 86.2% (n=25) of school. Insufficient differentiation (79.31%, n=23), the lack of in-class support (68.96%, n=20), the inappropriate use of textbooks (72.41%, n=21), inappropriate instruction (58.62%, n=17), and inappropriate teacher expectations (58.62%, n=17) were also listed as a challenge by schools in relation to meeting the needs of pupils with SEN in the classroom. Internationally, immersion/bilingual education teachers have also cited knowing what to teach, meeting individual pupils' needs, and lesson planning as challenging (Casey et al., 2013).

Similar to the present research, over a decade ago, it was found that the lack of assessment resources through the medium of Irish, the lack of educational psychologist services through the medium of Irish, time demands, and parental involvement were challenging for these schools (NCCA, 2007a, Ní Chinnéide, 2009; Nic Gabhann, 2008).

Figure 4. 14 The challenges faced by IM schools (N=29) when meeting the needs of pupils with SEN through the medium of Irish.

4.23 The Number of Pupils with SEN who have Transferred from IM Schools

Schools were asked how many pupils with SEN, if any, had transferred from their IM school within the 3-year period from September 2014 to September 2017 (see Figure 4.15). Of the cohort studied, 24.13% (n=7) of the schools had pupils transfer to other IM mainstream schools, 75.86% (n=22) had pupils transfer to an English-medium mainstream school, 13.79% (n=4) to a special school (English-medium), and 27.5% (n=8) to a special class attached to an English-medium school. No school had pupils transfer to a special class in an IM school. It was found that in total 121 pupils with SEN transferred within this timeframe (approximately 1.58% based on an estimated enrolment figure of 7,651). This approximate figure coincides with the figure of 1.5% generated by Ní Thuairisg & Ó Duibhir (2016) for the number of pupils who transferred from IM schools in the RoI. As shown in Figure 4.15, most of these pupils (73.55%, n=89) transferred to English-medium mainstream schools. Less than a fifth (16.52%, n=20) transferred to another mainstream IM school. Eight pupils (6.61%) transferred to a special class in an English-medium school. This could be due to the lack of availability of special classes in IM schools, at the time of the present study, there are only four of these schools throughout the RoI. A very low proportion of students (3.30%, n=4) transferred to a special school (English-medium).

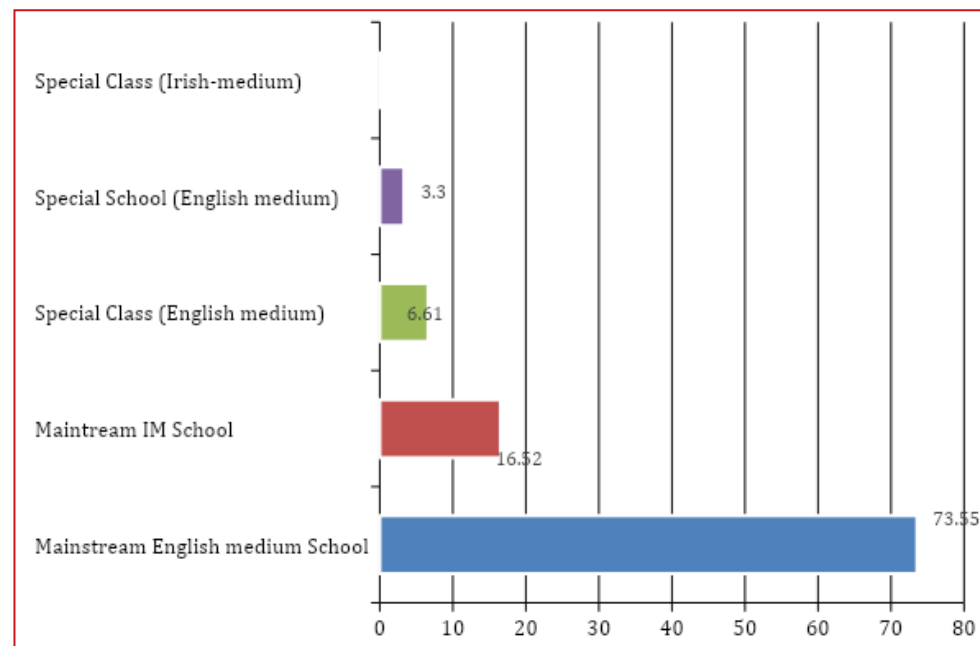
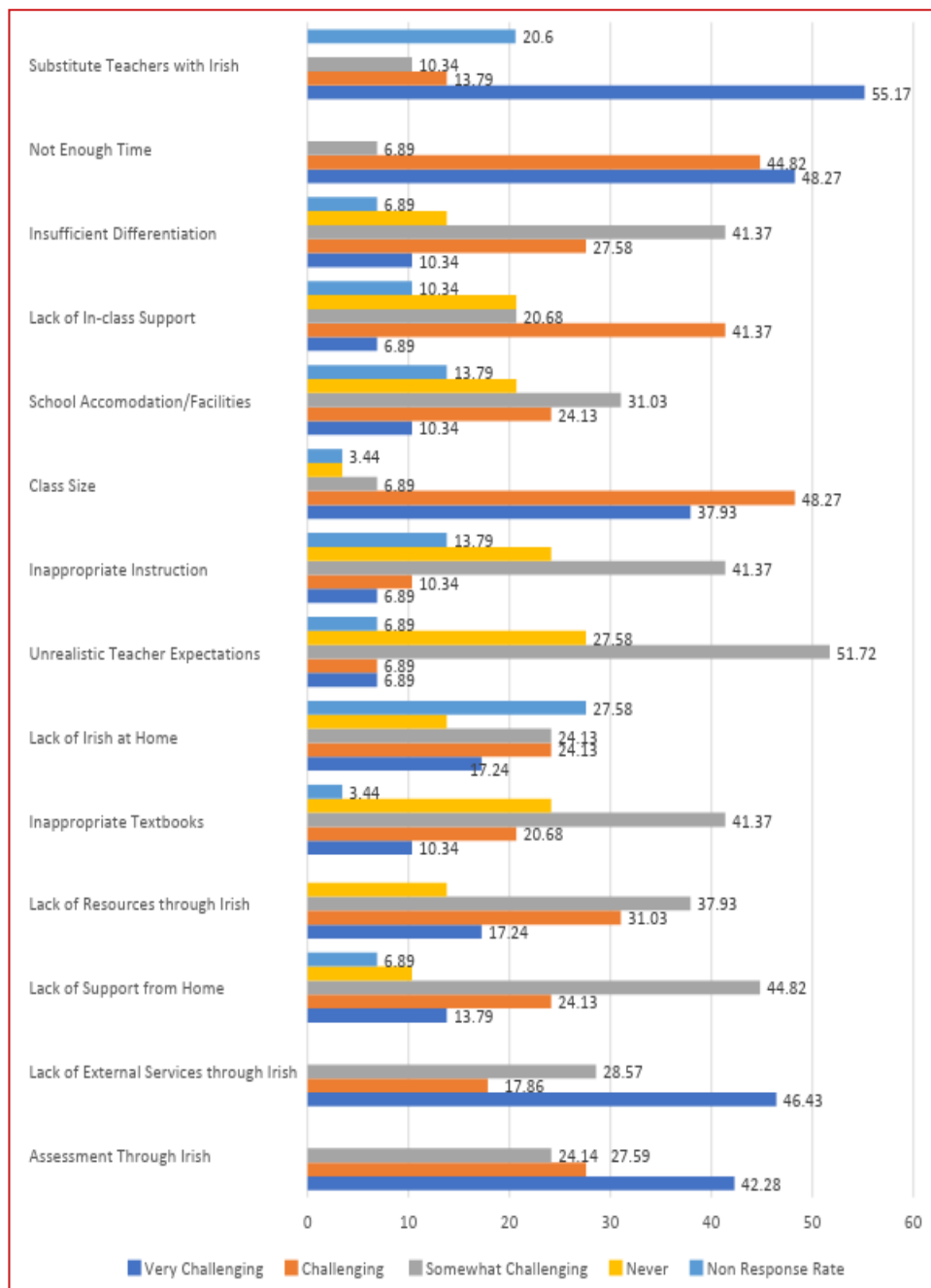


Figure 4.15 The other forms of education (%) to which pupils with SEN (n=121) transferred to from IM schools during the period from September 2014 to September 2017.

Schools (N=24) were asked what the reasons for these transfers were (see Figure 4.16). The primary reason cited by schools was parent anxiety or worry (70.83%, n=17). Nearly half of all transfers (45.83%, n=11) occurred due to the child having difficulty learning through Irish. Transfers also occurred on the recommendation of the educational psychologist in 41.67% (n=10) of cases, the speech and language therapist in 16.67% (n=4), and the occupational therapist in 4.17% (n=1). Five schools (20.83%) stated that transfers occurred on the advice of the school principal or classroom teacher, and two schools (8.33%) reported that the school was unable to meet the needs of the child. Other (33.33%, n=8) reasons cited include a lack of understanding by parents regarding SEN and IM education (n=1), pupils moving to a new house (n=3), financial constraints and the distance to the school (n=1). These findings correspond with both national (Ní Thuairisg & Ó Duibhir, 2016) and international (Harding, 2012; Wesley & Baig,

2012) studies in this area, who also found that pupils with SEN often transfer from immersion education due to parental concerns around the suitability of this form of education for their child, and due to the recommendations of educational professionals, such as, educational psychologists.

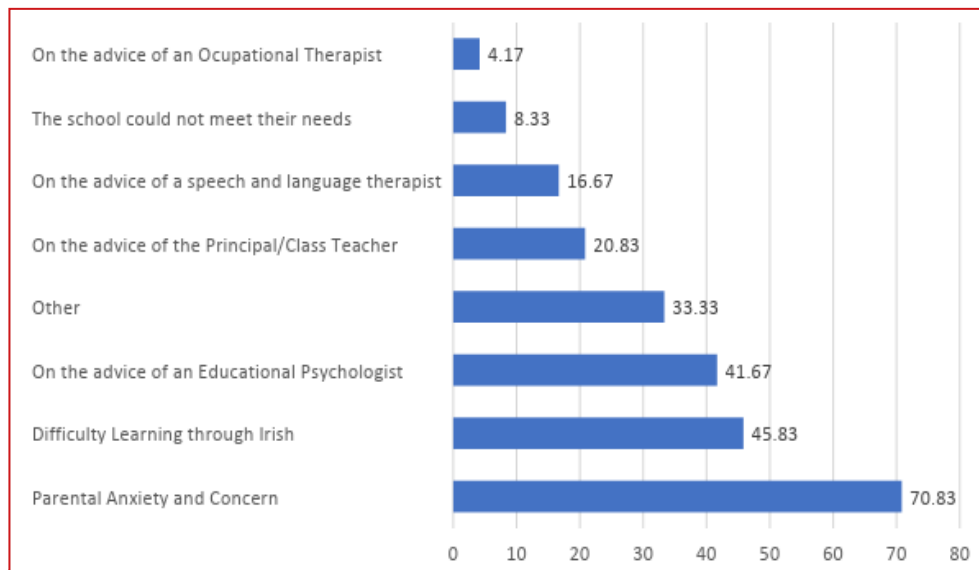


Figure 4. 16 The reasons (%) reported by schools (N=29) as to why pupils with SEN transferred from IM schools during the period from September 2014 to September 2017.

4.24 Conclusion

The results outlined in this chapter reinforce the fact that there has been a change in the SEN of pupils in IM schools over the last decade. The findings suggest that there has been an increase in the percentage of pupils with SEN attending these schools. A breakdown has been provided of the frequency of SEN reported by geographical location and class level. The methods used to select pupils for additional teaching support have been outlined, along with the teaching strategies employed. Furthermore, an overview of the challenges faced by schools when undertaking this provision is provided. In the following chapter the results of the second stage of the research will be provided.

5.1 Introduction

In this chapter, the results of the case studies undertaken in the second stage of the present study are presented and analysed. The context of the study and an overview of participant profiles are presented. The results were analysed using thematic analysis (Braun & Clarke, 2006) and the process undertaken will be explained in further detail. The following themes are presented in this chapter:

- (i) the perceived benefits of IM education for pupils with ASD, dyslexia, and SSLD,
- (ii) the challenges of IM education for these pupils,
- (iii) the challenges faced by parents, SNAs, teachers, and principals when educating these pupils through Irish as a L2,
- (iv) the additional supports required by IM schools to ensure inclusion and access to curriculum content for all pupils, and
- (v) the educational practices currently in place in IM schools to meet the needs of pupils within these categories of SEN.

Pupil voice is also included in this chapter, in relation to the perspectives and experiences of pupils with ASD, dyslexia and SSLD who are attending IM schools. The responses provided by participants (mainstream class teachers, special education teachers, principals, and one parent) in Irish are presented in this chapter along with an English translation. Many of the findings within this stage of the research correspond with international research that has been undertaken

on immersion/bilingual education internationally. Hence, these findings may be transferrable to other immersion and bilingual education contexts.

5.2 Data Analysis

The qualitative data gathered was analysed using Braun and Clarke's (2006) six step framework of thematic analysis. This process enabled the researcher to identify patterns and themes within the qualitative data while addressing the research questions (Braun & Clarke, 2006; Clarke & Braun, 2013b). A challenge of this method for the researcher is "to find patterns within those words and to present those patterns for others to inspect while at the same time staying as close to the construction of the world as the participants originally experienced it" (Braun & Clarke, 2006, p. 18, Clarke & Braun, 2013a). This method of analysis was selected as it is not associated with one epistemology or theoretical perspective (Maguire & Delahunt, 2017). The data gathered was analysed on a semantic level, where what the participant said was analysed for 'surface meaning' and on a latent level, where ideas, assumptions, and ideologies were identified and examined (Braun & Clarke, 2006, p. 84). The data management software Nvivo (QSR international PTY Ltd, 2018) was used to organise the data in a meaningful and systematic way. It is very important to note that this software does not analyse the data, or formulate conclusions, these tasks were completed by the researcher.

In the first stage, data familiarisation involved the transcription of audio interviews undertaken with participants, these were transcribed verbatim. They were then read and re-read for familiarisation. Notes were taken using a research journal of early impressions and emerging themes (Braun & Clarke, 2006). The transcribed interviews were then imported into Nvivo for data management purposes. Open coding or the generation of initial codes occurred in the second stage. Here the data was reduced into smaller sections and coded in relation to the research questions of the study. Open coding was applied during this stage (Braun & Clarke, 2006; Lincoln and Guba, 1985). Definitions were constructed for

each open code so that data could be deconstructed into non-hierarchical codes (Maykut & Morehouse, 1994, pp. 126 – 149). During this process the researcher read through each transcript, applied codes, compared codes, modified existing codes, and generated new codes. Here categories could be described as being halfway between initial codes and themes. The third stage involved searching for themes. Here, the codes that were generated in the second phase were analysed further and reconstructed into sub-categories, or broader themes (Braun & Clarke, 2006). This allowed for a more in-depth understanding of the data, as it was analysed for divergent views, attitudes, beliefs, behaviours, and negative cases. Stage four involved reviewing themes. All the codes generated in stage three were reviewed. All the data associated with each theme was read and the assessed as to whether it supported the assigned theme. This stage was informed by the questions outlined in Braun & Clarke (2006). In stage five, themes were defined and codes were consolidated into more abstract, philosophical and literature-based themes. This created a final framework of themes for analysis and allowed for the exploration of inter-relatedness for the purpose of reporting findings. In stage six, the analytical memos that were written by the researcher throughout all the above stages were analysed. These summarised the content of each theme. Memos related to five key areas:

- i. What was said within the cluster of codes?
- ii. The relevance of coding patterns,
- iii. The background information of participants and the patterns that exist in relation to participant profiles,
- iv. The inter-connectedness of each theme, and how they relate to each other. The importance of each theme in relation to addressing the research question was also analysed, and
- v. Considering primary sources in the context of relationships with the literature reviewed, as well as identifying gaps in the literature.

Data analysis validation involved testing, validating, and revising the analytical memos taken. When the memos gathered were synthesised, coherent, and cohesive findings were generated. Figure 5.1 illustrates how these stages of coding were implemented on a practical level within the present study under the theme of the additional supports required. Here you see an example of the flow from codes to categories to themes (further elaborated in the codebook¹, see Appendix W).

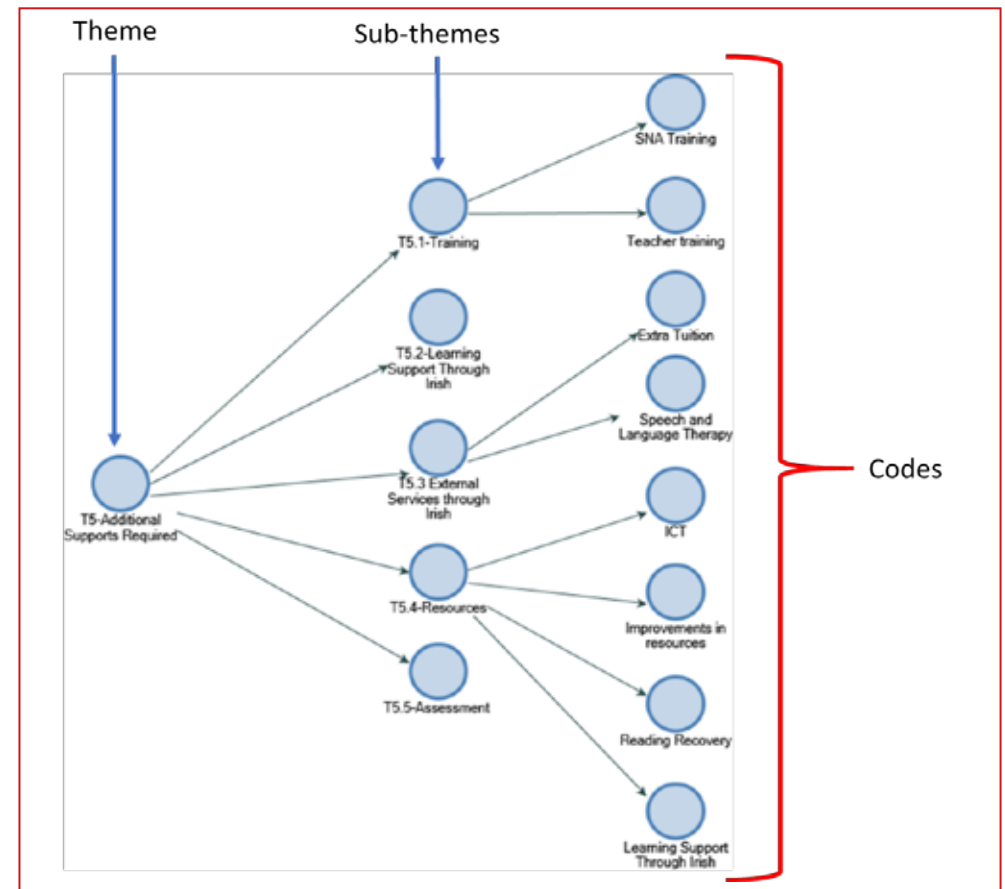


Figure 5.1 An example of the flow from codes to categories to themes during the coding process in the present study.

¹ Codebook – example of the process of conceptually mapping codes to categories to themes for the theme the additional supports required.

5.3 The Context of the Study

Case studies were conducted with pupils with ASD (N=4), dyslexia (N=4), and SSLD (N=3) in IM schools in the ROI and NI. Each case study involved interviews with the pupil, their parent, class teacher, special education teacher, principal, and SNA if a pupil was allocated one. Stage two also included interviews with the parents of pupils with SEN who had been withdrawn from IM education due to their SEN (N=6). Before the results of this stage are presented, the background and context of each of these two groups is presented. Table 5.1 displays profiles for the pupils attending an IM school participating in the present study in relation to; (i) their class level, (ii) the language(s) spoken in their home, (iii) when and where their SEN was identified, (iv) whether their assessment was undertaken publicly or privately and, (v) whether it has been suggested that they should transfer from an IM school due to their SEN. Like previous studies on the home language of pupils in IM schools it was found that most pupils came from homes where English was their first language (Harris et al., 2006; McAdory & Janmaat, 2015; Ní Thuairisg & Ó Duibhir, 2016).

Table 5. 1 The profiles of pupils with special educational needs in IM schools who participated in the case study research.

5.3.1 Participating Pupils: ASD.

For this cohort (N=4), three pupils were identified as having SEN by their early childhood practitioner in an IM preschool. All three were assessed and diagnosed through a public assessment scheme before they started school. The fourth pupil with ASD had their SEN identified in primary school by the class teacher, however, prior to this their parents had suspected that their child may be experiencing some difficulties. This participant was assessed and diagnosed privately due to no assessment being available in the school. The pupil's parents said that this caused a delay in obtaining a diagnosis for their child.

	Class Level	Home Language	SEN Identified	Diagnosis	Class Level at which Diagnosed	Transfer Suggested
Pupil 1: ASD (School B, Rol)	4th Class	English	IM primary school	Privately	2nd Class	No
Pupil 2: ASD (School C, Rol)	3rd Class	English	IM preschool	Publicly (local health board)	Junior Infants	Yes
Pupil 3: ASD (School C, Rol)	6th Class	English	IM preschool	Privately	IM Preschool	Yes
Pupil 4: ASD (School D, NI)	3rd Class	English	IM preschool	School	Junior Infants	No
Pupil 5: Dyslexia (School A, Rol)	5th Class	English	IM primary school	School	Unknown	Unknown
Pupil 6: Dyslexia (School B, Rol)	4th Class	English	IM primary school	Privately	2nd Class	Yes
Pupil 7: Dyslexia (School C, Rol)	4th Class	English	IM primary school	School	3rd Class	No
Pupil 8: Dyslexia (School D, NI)	5th Class	Irish	IM primary school	School	3rd Class	Yes
Pupil 9: SSLD (School A, Rol)	2nd Class	English	Before school age	Publicly (local health board)	Before primary IM school	No
Pupil 10: SSLD (School C, Rol)	Senior Infants	English	Before school age	Publicly (local health board)	Before primary IM school	Unknown
Pupil 11: SSLD (School D, NI)	Senior Infants	Irish/English	Before school age	Publicly (local health board)	Before primary school	Yes

So, we tried to get it done through the school which didn't happen, so that kind of delayed it for a year as well. Then we just went and did it ourselves. (Parent of Pupil 1, ASD, School B)

5.3.2 Participating Pupils: Dyslexia.

Four pupils were included in this cohort; however, interviews were only conducted with three parents in this group (N=4). One pupil was being raised

mostly through Irish with some English. The remaining pupils (n=3) came from English speaking homes with Irish being used informally at home and for the purposes of undertaking homework. One pupil in this group attended a DEIS school in the RoI, two were enrolled in non-DEIS schools in the RoI, and one pupil was in an IM school in NI. All pupils were in senior classes in their school. All were identified as having learning difficulties when in a primary IM school. All the parents interviewed (n=3) recognised that their child was having difficulties in school. One parent said that they noticed their child struggled with learning English phonics, especially the double blends and this was a warning sign for them.

I noticed that she was having problems with her pronunciation... she was trying to do Jolly Phonics, the whole lot out, and then she was going no hang on I can't get that. (Parent of Pupil 7, Dyslexia, School C)

5.3.3 Participating Pupils: SSLD.

Three pupils with a SSLD participated in this stage of the study, interviews were conducted with two of the parents within this group. One pupil was formally diagnosed when in an IM preschool, and the other when attending an English-medium preschool. Two participants in this group came from homes where English was the home language and Irish was used occasionally. The third pupil came from a home where Irish was the home language of one parent and English was the home language of the second parent who had limited Irish. One pupil in this cohort attended a DEIS school in the RoI, one attended a non-DEIS school in the RoI, and one attended an IM school in NI. All of these pupils were in a junior class in their school.

5.3.4 Observations.

Observations were conducted in the classes of pupils participating in the study. The objective of these were to observe the practices in place in classes to meet

the needs of pupils with ASD, dyslexia, and SSLD when learning through Irish. In School A, observations were undertaken in the classes of two pupils (dyslexia and SSLD) participating in the study. In School B, the two pupils participating were in the same class (ASD and Dyslexia). Three pupils in different classes were observed in School C (ASD, dyslexia, and SSLD). A second pupil with ASD in this school, who participated in the present study, was not observed as it was a party day when the observations were taking place. Two pupils in different classes were observed in School D (SSLD and dyslexia), however it is important to note that the pupil with dyslexia was undertaking sex education on the day of the researcher's visit. This meant that the observation time was reduced, as the researcher did not feel it was appropriate to observe the teaching of this sensitive topic. The pupil with ASD in School D was not observed due to time constraints. In this section, the findings of these observations are discussed within the themes outlined above. Nevertheless, it is important to remember that the findings represent only a limited period of time spent in the classroom and they are not representative of all the practices undertaken in the schools.

5.3.5 Pupils with SEN who Have Transferred from IM Schools.

This cohort consisted of six parents of pupils with a variety of SEN who transferred their child from IM schools to English-medium schools due to their SEN. Table 5.2 displays: (i) the languages spoken in the homes of these children, (ii) where and when their SEN was identified, (iii) whether they were assessed privately or publicly and, (iv) whether it was suggested that these pupils should transfer from IM education due to their SEN. As can be seen, three parents interviewed had children with dyslexia who transferred to an English-medium school. Two of these children had a dual diagnosis of dyspraxia. Both parents stated that the difficulties their child experienced due to dyspraxia did not contribute to their decision to transfer their child. Interviews were also conducted with the parents of one child with ASD, one child with ADHD/Mild GLD, and one child with dyspraxia and Mild GLD. All these participants were living in the RoI. The participants in this cohort had no connection to the schools that participated in

the case studies. It is important to note that these pupils who transferred from IM education did not attend the schools participating in the present study.

Table 5. 2 The profiles of pupils with SEN who transferred from an IM school to an English-medium school due to their SEN.

	Class Level Now in English-medium School	Class Level Transfer	Language Spoken at Home	SEN Identified	Diagnosis	Diagnosis	Transfer Suggested
Pupil A: ADHD/ Mild GLD/ Mobility Issues	6th Class	2nd Class	English	At Home	Publicly (local health board)	Before starting IM Preschool	Yes
Pupil B: ASD	5th Year Post Primary	3rd Class	English	IM Preschool	Publicly (local health board)	Junior Infants	Yes
Pupil C: Dyslexia/ Borderline ADHD/ Sensory Needs	6th Class	2nd Class	English	Primary IM School	Publicly (local health board)	1st Class	Yes
Pupil D: Dyslexia/ Dyspraxia	6th Class	2nd Class	English	Primary IM School	Privately	Summer of Senior Infants	Yes
Pupil E: Dyspraxia/Mild GLD	4th Year Post Primary	1st Year Post Primary	English	Primary IM School	Privately/ Publicly	2nd Class	No
Pupil F: Dyslexia/ Dyspraxia	2nd Year Post Primary	1st Year Post Primary	English	Primary IM School	Privately	6th Class	No

5.3.6 Teaching Qualifications in Special Education.

Within the interviews, teachers, principals, and the SNA were asked about their level of education and training for working with pupils who have SEN. The SNA who took part in the study, had undertaken a QQI level six certificate for SNAs. Four of the class teachers (N=10) and one school principal (N=4) spoke about the special education tuition they received during their ITE. Fifteen participants (N=18) spoke about the continuous professional development they undertake that informs their practice. Eight of these were class teachers (N=10), four were special education teachers (N=4), and three were principals (N=4). The types of courses these participants completed were: dyslexia, the Picture Exchange Scheme (Frost & Bondy, 2002), TEEACH (TEEACH, 2019), managing anxiety in children, autism, behaviour management, Nurture, creating IEPs, and differentiation. In the Rol, three of the special education teachers (N=4) had a postgraduate qualification in special education (one Masters, two postgraduate diplomas). Whilst five participants in the Rol spoke about how their years of teaching experience informs their practices and understandings in schools. As is discussed in more detail later in the findings, the teachers of pupils with ASD spoke about the need for more training in this area to be made available and they also discussed the need for those providing education in this area to have a deeper understanding of bilingualism and SEN. As mentioned in Chapter 2, there is a need for further teacher education in the area of special education provision for children learning through a L2. This education should be provided in ITE and CPD contexts to offer all teachers the knowledge and skill set required to meet the needs of children learning through a L2. Education in this area is important for teachers in all schools, not just those in immersion education, as there are a high number of pupils learning through a second language in English-medium schools also.

5.4 The Benefits of IM Schools for Pupils with SEN

Parents of pupils with SEN in IM schools (N=9), parents of pupils with SEN who transferred from IM schools (N=6), school principals (N=4), special education teachers (N=4), mainstream class teachers (N=10), and one SNA were asked what the perceived benefits of attending an IM school were for pupils with SEN. It was reported that the primary benefits these pupils experience were in the areas of: (i) bilingualism, (ii) the academic benefits of learning Irish, (iii) higher levels of self-esteem/self-confidence/pride and, (iv) school culture. Firstly, the benefits of IM education for pupils with SEN will be examined, in relation to language and then in terms of individual personal development.

5.4.1 Bilingualism.

Bilingualism was referred to as a benefit of IM education for pupils with SEN by 16 participants (N=34). Three of the school principals (N=4), all the special education teachers (N=4), five class teachers (N=10), and four parents (N=15) reported this benefit. Of these respondents, eight commented on the benefits of bilingualism in relation to cognitive development (advantages) and three referred to the cross linguistic transfer of skills. International research has also shown that there are benefits of bilingualism in the areas of cognitive skills and working memory (Adesope et al., 2010; Bialystok et al., 2004; Bialystok et al., 2008; Bialystok et al., 2009; Carlson & Mettzooff, 2008) and the cross linguistic transfer of skills (Cummins 2008; Melby-Lervåg & Lervåg, 2011) for children without SEN. Subsequently, these findings suggest that pupils with SEN may also benefit in these areas. One class teacher explained how pupils benefit in this area on a practical level.

Go bhfaigheann siad tuiscint ar dhá theanga, agus na cineál struchtúr a bhaineann leo, agus go bhfuil cosúlachtaí idir na teangacha, agus go bhfuil siad ag déanamh athrá arís sa Bhéarla agus ansin arís sa Ghaeilge.

(Class Teacher of Pupil 5, Dyslexia, School A)

They get an understanding of two languages, and their structures, and that there are similarities between languages, and that they are doing repetition in English and then again in Irish.

5.4.2 Proficiency in the Irish language.

The opportunity to learn Irish was referred to as a benefit by 12 participants (N=34). Within this group, one school principal (N=4), two class teachers (N=10), four parents (N=9), two special education teachers (N=4), one SNA, and two parents of pupils who transferred referred to this benefit. Of all the parents interviewed (N=15), three stated that even though their child may have difficulty with aspects of the Irish language (one child with reading/writing, two pupils with speaking Irish) they understand the spoken language and have the ability to function in IM education. Three parents (N=15) and one special education teacher (N=4) told of how being immersed in the Irish language helps pupils with SEN access the curriculum. One parent explained how immersion in the Irish language had been a positive experience for their child and that this practice has meant that there has been no difficulty for him learning Irish.

Because he's been immersed in it. Because it's not the language that's the main problem. (Parent of Pupil 3, ASD, School C)

Parents and teachers reported that if these pupils with SEN attended an English-medium school, they would not have the opportunity to learn Irish due to exemptions (see Chapter 1 for details). This they felt would be a disadvantage for them.

It's why I want to keep him in the Irish school, because I think it would be another bonus to him. Even if he does have learning difficulties, it will be a door that's open to him. If he was in an English-speaking school, I feel that door would be closed. (Parent of Pupil 5, SSLD, School A)

All the parents of children with SEN who transferred (N=6) their child to an English-medium school reported that even though their child has left IM education they still have the benefit of having a good standard of Irish. One parent who transferred their child who has ADHD and Mild GLD gave an example of their child's level of ability.

We didn't let him do written Irish and to this day the teachers, like he's graduating (from 6th class) now next week, said his oral Irish was the equivalent of them in his class. (Parent of Pupil C who transferred, Dyslexia/Borderline ADHD/Sensory)

International research has shown that children with ASD, SSLD, and dyslexia (Bonifacci et al., 2017; Kay-Raining Bird et al., 2016; Palladino et al., 2013, 2016) can acquire a L2 at no cost to their L1 development. Findings of the present study also suggest that pupils with these SEN in IM schools can acquire Irish as a L2. The level to which they attain proficiency in Irish is stated to reflect their L1 abilities which is discussed in further detail below. This finding also suggests that the aim of immersion education, additive bilingualism, is being achieved by pupils within these categories of SEN.

5.4.3 Learning through Irish.

Principals in all schools (N=4), three of the parents of pupils with ASD in IM schools (N=4), one class teacher of a pupil with ASD (N=4), one class teacher of a pupil with SSLD (N=3), one special education teacher (N=4), and two parents of pupils with SEN who transferred (N=6), said that depending on the SEN of the child the Irish language and learning through Irish may not pose as an additional

challenge for pupils with SEN. The three parents of pupils with ASD attending an IM school spoke about how they did not feel that the Irish language limited their child's access to the curriculum, and that their child was achieving well academically.

Like, the language isn't a problem for him, you know, like he's not top of the class, but he's not bottom of the class either, he's kind of somewhere in the middle. So, the language isn't a huge issue, so the supports that he needs aren't related to the language as such, you know. (Parent of Pupil 3, ASD, School C)

The other two parents stated that their children did not have any speech and language difficulties and this in turn meant that learning through Irish was not more challenging for them.

His main problem is just writing, and he finds homework quite hard because he just gets tired and he gets frustrated and when he comes out of school at the end of the day he doesn't want to know anymore. I wouldn't say that would be specifically through learning Irish that he was having difficulties, no. (Parent of Pupil 4, ASD, School D)

Two parents of pupils who transferred with SEN (N=6) spoke about how their child's ability to learn through Irish was not a factor which motivated them to transfer their child to an English-medium school. These children did not have any difficulty learning through Irish. One parent described how their child would have difficulty expressing themselves regardless of the language.

Irish I don't think held her back, because she'd still struggle to say what she wants to say in English. (Parent of Pupil E who transferred, Dyspraxia/MGLD)

The other parent described how their child took to the Irish Language with ease.

They (professionals) kept saying to me, you'd want to make him exempt from Irish. He took to Irish like a duck to water. (Parent of Pupil A who transferred, ADHD/MGLD/Mobility)

5.4.4 Academic Advantages in Post-Primary School.

All School principals (N=4), three class teachers (N=10), two parents of pupils with SEN in IM schools (N=9), and two parents of pupils with SEN who transferred from IM education (N=6) felt that IM education gave pupils an academic advantage if they went on to attend an English-medium post-primary school. Parents of pupils with SEN currently attending an IM school (n=2) also felt that being immersed in the Irish language is an academic advantage for their child in terms of state exams and self-confidence when they attended post-primary school.

Cúpla páiste atá tar éis teacht ar ais thar na blianta, bíonn siad ana bhródúil go bhfuair siad 'As' i nGaeilge, in sna scrúdaithe agus b'fhéidir go raibh siad fíor lag i ngach rud eile.	Some of the children that have come back over the years, they are very proud that they got 'As' in Irish, you know in the exams and maybe they were very weak in everything else.
(Principal, School A)	

Parents who transferred their child (n=2) to an English-medium school said that even though their child was entitled to an exemption in Irish, they fought for them to continue studying Irish. Their increased understanding and ability in Irish were seen by parents as an academic advantage.

We fought for him to continue with Irish because they wanted to give him an exemption. We fought against that anyway and he's actually really good at Irish. His teacher wants him to do honours Irish for the Leaving Cert. (Parent of Pupil B who transferred, ASD)

The study by Barrett (2016) also found that teachers in IM schools reported having Irish as a L2 was a benefit for pupils with SEN. The findings of the present study show that parents, principals, and teachers feel that having attended an IM primary school is an academic advantage for these pupils, even if they choose not to continue being educated through the medium of Irish in post-primary school.

5.4.5 Personal Development.

In this study, higher levels of self-esteem, self-confidence, and pride were cited as a benefit experienced by pupils (n=11). All school principals (N=4), three class teachers (N=10), one special education teacher (N=4), two parents of pupils enrolled in IM schools (N=9), and one parent of a pupil who transferred stated that pupils had higher levels of self-confidence and pride. Two of the principals said that they noticed this especially when pupils went on to attend an English-medium post-primary school.

Bíonn siad an-bhródúil go bhfuil siad in ann Ghaeilge a labhairt, agus go bhfuil an teanga sin acu, agus nach mbíonn sé sin ag na páistí a bhíonn ag freastal ar na scoileanna lán-Bhéarla.	They are proud that they can speak Irish, and that they have that language, and that the other children attending the English-medium schools don't have that.
(Principal, School A)	

Another principal gave an example of how they felt that IM education made pupils feel comfortable and confident in themselves and this in turn had a positive impact on their learning.

Mothaíonn paistí muiníneach, mothaíonn siad compordach ceisteanna a chur nuair nach bhfuil tuiscint ceart acu ar rudaí nó má tá deacrachtaí acu le rudaí, bíonn siad muiníneach go leor ceisteanna a chur.

(Principal, School D)

The children feel confident; they feel comfortable to ask questions when they don't understand something properly or when they have a difficulty with something. They are confident enough to ask questions.

Four of the class teachers interviewed (N=10) also said that they have recognised these traits in their pupils. Furthermore, two parents of a pupil with dyslexia in IM schools (N=3), and one parent of a pupil with dyspraxia/mild GLD who transferred their child stated that their child experienced this benefit. The parent of a pupil with dyslexia currently enrolled in an IM school gave an example of how this helped their child.

B'fhéidir an rud is mó ná an leibhéal, cineál féiniúlachta agus neamhspleáchas a thugann sé sin don pháiste. (AINM AN PHÁISTE) mar dhuine in amanna deacrachtaí más maith leat, litearthachta agus acadúlachta agus a leithéid, tá sí iontach cumasach asti féin, más maith leat agus tá sí, tá sí sásta léi féin. (Parent of Pupil 8, Dyslexia, School D)

Maybe the biggest thing is the level of self-identity and independence it gives the child. As a person, (CHILD'S NAME), as a person in times of difficulty if you like, literacy and academically and that, she'd be very well able in herself, if you like, she is happy in herself.

A link between bilingualism and an increased sense of identity, culture and community has been reported (Baker, 2003; Baker & Wright, 2017; Cummins, 2000; Garcia, 2009). Similarly, in the IM context parents have reported in previous research that they want their child to continue on to an IM post-primary school because of these advantages (Ó Duibhir et al., 2015). These findings therefore

suggest that pupils with SEN learning through Irish as an L2 also benefit in terms of self confidence and self-esteem.

5.4.6 School Culture.

The positive school culture and atmosphere in IM schools were referred to by 18 participants (N=34) as a benefit. All the school principals (N=4), three class teachers (N=10), one special education teacher (N=1), seven parents of pupils enrolled in IM schools (N=9), and two parents of pupils who transferred (N=6) referred to this benefit. Reference was made by five parents (N=15) to the school being smaller in size, which meant that pupils were known to all school staff. One teacher explained how this worked on a practical level in terms of teacher collaboration when developing a pupil's social skills.

Ní raibh ormsa ach le rá le hochtar i rith am lón, go mbeidh mo chara ag teacht timpeall más cuma libh iarracht labhairt leis, féachaint ina shúil, i scoil mhór ní bheidh seans ar bith rudaí mar sin a dhéanamh, it's na mion mion rudaí. (Class Teacher Pupil 1 & 6, Dyslexia/ASD, School B)

I only had to tell eight people at lunchtime that my friend would be going around, if you wouldn't mind speaking to him, looking him in the eye, in a big school you would not have the chance to do things like that, it's the little, little things.

In this study, 10 parents (N=15) spoke about how they chose to send their child to an IM school because of positive reports they had heard of the school's culture and special atmosphere. Four parents referred to the fact that they had seen that other children who attended the IM school were happy and doing well academically, this was a motivating factor for them.

The Gaelscoil was the first Irish school in our area and one of my nieces was the first of the kids going into it. All the kids went into it and they all seemed to enjoy it. (Parent of Pupil A who transferred, ADHD/MGLD/Mobility)

The school's community spirit and positive atmosphere of inclusion was a benefit which was reported by 11 participants (N=34). They felt that IM schools were places that nurture pupils and help them develop holistically. One parent of a pupil with ASD, spoke about how their school went out of their way so that their child was able to access the curriculum.

I can only speak from my perspective on this school, because from the word go, they had such experience. There's lots of other kids with ASD, so they had lots of experience with it. They put the resources in place. Even before the provisions were there, they still gave him a special needs assistant, an SNA, even though they didn't have resources for it. (Parent of Pupil 2, ASD, School C)

While a parent of a child with dyslexia and dyspraxia spoke about how even though their child has transferred from the IM school to an English-medium school, they will always be a part of the school community.

The school itself has a kind of community. You're always part of the community. We were at the graduation the other night and it was 'your child is not leaving the school; you're still always going to be from the school' and stuff like that. (Parent of Pupil F who transferred, Dyslexia/Dyspraxia)

Similar to international and national research findings, parents in the present study discussed how they were motivated to send their child to an IM school due to the school's culture, community, and positive reputation reports from friends and family regardless of their SEN (Dorner, 2010, 2012; Mas-Mac Moury, 2013; Mhic Mhathúna & Nic Fhionnlaoich, 2018; Ní Thuairisg & Ó Duibhir, 2016, Ó Duibhir et al., 2015; Wesley & Baig, 2016).

5.5 Practices in Place to meet the needs of Pupils with SEN

Through semi-structured interviews with teachers (N=10), special education

teachers (N=4), and principals (N=4) the practices in place in IM schools to meet the needs of pupils with SEN through the medium of Irish were evaluated. The practices in place in schools in the areas of parental support, inclusion, team teaching, pupil withdrawal, support from educational professionals, ICT, and differentiation will be discussed. The findings of these interviews will also be triangulated with the observational data gathered.

5.5.1 Supporting Parents.

Ten participants (N=34) spoke about the importance of parental support. All of the schools that participated in the present study provided parental support and encouraged parental involvement. Three of the school principals (N=4), two class teachers (N=10), and five parents of pupils enrolled in IM schools (N=9) discussed the importance of supporting parents, listening to their concerns, and offering them professional advice and guidance.

Chuid maith ó thaobh obair na hoifige de bhaineann sé le tuismitheoirí chomh maith, mar go háirithe de thuismitheoirí nach bhfuil taithí acu air seo. Cuireann sé an-eagla orthu agus bíonn cuid acu an-trína chéile, so bíonn orm saghas labhairt leo agus iad a shíúil tríd an bpróiseas agus cúpla rud a mhíniú dóibh. (Principal, School B)

Most of the work in the office relates to parents as well, especially in the case of parents who have no experience of this. It scares them and some of them are upset, so I kind of have to talk to them and walk them through the process and to explain a few things to them.

One of the principals spoke about the importance of equipping the parents with research-based knowledge and empowering them to make informed decisions regarding their child's education.

Is rud a bhíonn ar siúl againn anseo chomh maith, tuismitheoirí a chumasú, conas dul ar ais agus moltaí agus gach rud a cheistiú. Ionas gur féidir leo a bheith cinnte go bhfuil an rud is fearr á dhéanamh dá bpáistí féin. (Principal, School C)

It is something we do here as well, to empower parents on how to go back and question the recommendations and everything. So, they can go and be sure that they are doing the right thing for their child.

Five of the parents of pupils with SEN (2 pupils with a SS LD/3 with ASD) currently enrolled in an IM school (N=9) spoke about the support they got from the school. This group included a parent from each of the four schools studied. Interestingly, this group of parents did not include any parents of children with dyslexia. All of these parents spoke about the approachability of the school and how easily information was shared between them and the school. One parent described the open-door policy of their school.

The teachers will approach me at any time if they think that I need to know something, and their door is always open if I need to speak to them. (Parent of Pupil 4, ASD, School D)

Two parents talked about how they were involved in their child's IEP planning. One parent explained how their experience was much more positive than that of other parents they know.

The common thing around IEP² time would be, oh, do you know, I just can't face this fight today, I'm dreading it. And I'm always there going, what fight? Like, an IEP for us was a chance to like, it's one of the many times that we sit down throughout the year. You know, it's not an isolated occasion. (Parent of Pupil 3, ASD, School C)

2 Individual education plan: this is an education plan tailored to the needs of the pupil. It is further outlined in chapter one.

This practice of providing support to parents is positive. Research has found there are benefits for children whose parents are informed and involved in their education. The benefits for pupils include higher levels of academic achievement, increased engagement, better behaviour, and more positive feelings towards learning (Bempechat & Shernoff, 2012; Ladd & Dinella, 2009; Voelkl, 2012; Wong & Sheikh-Khalil, 2014; Wong et al., 2018).

5.5.2 Inclusion.

Thirteen participants (N=34) discussed how the positive inclusive environment of the IM school fostered the development of pupils with SEN. This cohort included all of the principals (N=4), five class teachers (N=10), one special education teacher, one SNA, and two parents of pupils enrolled in IM education. All the school principals (N=4) spoke about the inclusive environment their school has created for pupils with SEN. One of the school principals discussed the importance of an inclusive attitude and values in a school.

Mar fhoireann go bhfuilimid oscailte d'fhoghlaím maidir le riachtanais speisialta agus ceapaim gur sin ceann des na rudaí is tábhachtaí a bhaineann le haon scoil, beag beann air éiteas teangeolaíochta na scoile. (Principal, School C)

As a team we are open to learning about SEN and I think that is one of the most important things in any school, regardless of their language of instruction.

Research has found that professional development is of utmost importance to help teachers develop a positive attitude and the skills required to create an inclusive learning environment where all pupils are respected (Avramidis & Norwich, 2002; Florin, 2008; Ring, 2010; Shelvin et al., 2009). Ensuring that SEN provision is a central part of the school's ethos and that there is a positive attitude towards inclusion in the school is important for promoting an inclusive environment (Avramidis & Norwich, 2002; Florin, 2008, 2014; Horne & Timmons, 2009; Shelvin et al., 2009). Therefore, as the above principal states, it is an

important aspect for all schools regardless of their language of instruction. The importance of having an inclusive approach to education was also referred to by five class teachers (N=10), one SNA, and a parent of a pupil with ASD (N=4). These participants spoke about the caring and supportive atmosphere for pupils. One teacher gave an insight into some of the supports in place in their school for pupils with dyslexia.

Agus muid ag cur a chuid taispeántas in airde, cuireann muid cúlraí ar leith ar na cláranna gníomhacha chun chuidiú leo. Baineann muid úsáid as a léitheid de chlár pictiúrtha insan rang, ag cuidiú leo siúd b'fhéidir a bhfuil an ASD ag cur isteach orthu, agus nach maith leo athruithe mór insan lá scoile. (Class Teacher of Pupil 4, ASD)

We put different backgrounds up when we are putting displays on the interactive whiteboards to help them. We use picture boards (visual timetables) in the classroom to help those that might have ASD and that do not like big changes in the school day.

Practices such as those mentioned above were observed in all schools during school visits. The inclusive practices undertaken in schools participating in the present study are discussed further in the section below on pupil voice. However, it is important to consider that four parents of pupils who transferred (N=6) from IM education felt that staff in the IM school their child attended could have benefited from more education and training in relation to SEN and inclusion. This they felt would have made IM education more accessible for their child and that they would have had a more positive inclusive experience. All of these participants stated that they withdrew their child from an IM school due to the fact that they perceived that there was a lack of interest in SEN provision in their child's IM school.

I can't think of any positive practices they didn't adjust anything for him. School was the way it was, so there wasn't anything. (Parent of Pupil D who transferred, Dyslexia/Dyspraxia)

5.5.3 Pupil Withdrawal.

Participants (n=9) from all of the schools spoke about how they used individual pupil and small group withdrawal as a practice in their school. This practice was discussed by one school principal (N=4), one class teacher (N=10), three special education teachers (N=4), and four parents of pupils enrolled in IM schools (N=9). The decision to implement this form of additional support in schools was based on the needs of the pupils. One special education teacher explained why this process was used.

Sin an rud faoin bpost seo níl aon dá pháiste mar an gcéanna. Tá na fadhbanna agus na páistí chomh éagsúil óna chéile agus ní mar a chéile na fadhbanna bhíonn ag aon bheirt páistí (Special Education Teacher, School B).

That is the thing about this job, no two children are the same. The problems and the children are so different from each other and no two children have the same problems.

Interestingly, all of the parents of pupils enrolled in an IM school with dyslexia (N=4) spoke about their child getting support from the special education teacher in the RoI and the peripatetic services in NI. The only other parent who discussed the support their child received was a parent of a pupil with SSLD. All of these parents discussed how this additional support helped their child improve academically and also in terms of self-esteem.

She'd (the teacher) see a paragraph that she knew he could read. He'd stand up, straight out and read it. Before he'd be in the corner with his head down. (Parent of Pupil 6, Dyslexia, School B)

The principal of the school in NI discussed how they had implemented a pupil withdrawal programme in the school when their budget had allowed them for the academic year 2016/2017. Unfortunately, this service could not be implemented for the 2017/2018 academic year due to budget constraints. They spoke about the impact of this project on pupils' academic achievement.

Roghnaíomar 52 dalta ón scoil chun an tacaíocht breise sin a fháil. Faoi dheireadh an tionscadail nuair a d’amharc muid ar na scóranna measúnaithe, d’éirigh le 48 amach as an 52 dul chun cinn a dhéanamh.

(Principal, School D)

We selected 52 pupils in the school, to give them extra support. At the end of the project when we looked at the assessment scores, 48 out of the 52 had made progress.

Déanann muid freastal orthu freisin tríd rudaí cosúil le stáisiún. Mar go leor de na páistí seo, bheidís lag i go leor ábhar agus d’fhéadfaidís an lá a chaitheamh ag dul isteach agus amach agus níl sé sin go maith dóibh ná go maith den rang.

(Special Education Teacher, School B)

We attend to them through things like stations as well, because a lot of the children would be very weak in a lot of subjects and they could spend the day going in and out of the classroom and that is not good for them or the class.

During observations, all schools in the RoI were observed implementing this teaching method. Pupils were observed being actively engaged in individual and small group work with the special education teacher. In NI, pupils were observed working individually and in small groups with their classroom assistant and peripatetic teacher. Pupils in NI also worked in this format in the nurture classroom, for the development of health and well-being. It is important to remember that in the school in NI, the school’s SENCO was a full-time class teacher and did not have any time available to undertake pupil withdrawal. Research on pupil voice has shown that there are benefits of pupil withdrawal programmes for pupils with SEN. Studies have shown that pupils feel that they receive a better quality of support in this context, the work is more suited to their needs, there is less distraction and noise, and they receive more attention (Norwich & Kelly, 2004; Squires et al., 2016, Travers et al., 2010).

5.5.4 Team Teaching.

This method of teaching was discussed by two principals (N=4), three special education teachers (N=4), and three class teachers (N=10). The three special education teachers were located in the RoI and they spoke about how they go into mainstream classes to undertake activities such as station teaching, maths recovery, book clubs, and in-class small group work. One teacher explained the benefits of this on a practical level.

The teachers (N=3) who referred to team teaching taking place in their class all spoke about how they undertook planning activities in collaboration with the special education teacher. As mentioned previously, the SENCO from the school in NI was unable to undertake work like this in classes as they had full-time class teaching duties.

Cionn is go bhfuil mise insan seomra ranga ní bhíonn deis agam paistí a ghlacadh amach as an seomra i gcóir obair aonaracha. Déanaim an páipéarachas is dóigh. Tá mise i mbun na IEPS, comhairle a thabhairt do mhúinteoirí, and then bímse ann do chúntóirí ranga fosta.

(Special Education Teacher, School D)

Because I am in the classroom, I do not have the opportunity to take children out of the classroom for individual work. I do the paperwork I suppose. I am in charge of the IEPS, giving advice to teachers, and I am there for the classroom assistants too.

During observations in the schools in the RoI, team teaching practices were observed. In schools, special education teachers worked in-class with small groups, or in-class as an additional support to all pupils in the class. Research has shown that team teaching is an effective practice which is recommended by the Department of Education in the RoI and NI for providing additional support. It allows for the collaboration of ideas, impacts positively on pupil behaviour, and allows for differentiation, it is also suggested that it promotes greater support and inclusion of pupils (PDST, 2019).

5.5.5 Support from Educational Professionals.

Support and guidance are provided to schools from external professionals such as NEPS Psychologists, Special Education Needs Organisers (SENO), the NCSE Support Service, the Inspectorate, and allied health professionals (see Chapter 1 for further details). All the principals of the schools (N=4) and two class teachers (N=10) spoke about the invaluable support they received from educational professionals. The benefit of the support received by one school was explained by a principal.

Tá an t-ádh linn actually, tá an duine ó NEPS (síceolaí oideachais) atá ag obair linn, tá sí thar a bheith go maith. Tá sí ar fheabhas, chun chóras a mhíniú. (Principal, School B)

We are lucky actually, the person from NEPS (educational psychologist) that is working with us, she is very good. She is excellent at explaining the system.

Two class teachers (1 SSLD/1 dyslexia) and one school principal spoke about how they relied on the recommendations made in pupil assessment reports to guide their practice in schools.

Tá páiste i mo rang faoi láthair agus tá sé ag tosú ag úsáid ríomhaire sa rang in áit a bheith ag scríobh, mar sin rud de na moltaí a bhí ag an síceolaí nuair a rinne sí an tuairisc. (Class Teacher of Pupil 5, Dyslexia, School A)

There is a child in my class, and he is starting to use the computer in the class instead of writing because that is one of the recommendations that the psychologist had when he did the report.

Whilst a teacher of the pupil with SSLD also spoke about the support they received from external services.

Faighimse comhairle in amanna ó teiripeoirí cainte. Tá páiste agamsa le fadhbanna cainte, fadhb cainte faoi láthair, so idir teiripeoir cainte agus mamaí bímse ag plé na rudaí atá le déanamh agus na himeachtaí is fear. (Class Teacher of Pupil 11, SSLD, School D)

I get advice at times from the speech and language therapist. I have a child with speech problems at the moment so between the speech and language therapist and their mother discussing the things that there are to be done and the best practices.

5.5.6 ICT.

All of the schools (N=4) used ICT to help pupils with SEN access the curriculum. As mentioned in the section above on support from external services, two schools (School A and B) reported implementing ICT in the pupils' learning based on the recommendations in their educational psychological reports. During in-class observations, computers were available for pupils to use in all schools. Two schools had a computer room, whilst the other two schools had portable laptops and iPads. Two children (dyslexia/ASD) were observed completing written work on a laptop, which made learning easier for them. One of the teachers in these schools spoke about using ICT for pupils with motor skill difficulties.

Rudaí fisiciúla leis na mínluaile agus olluaile b'fhéidir go bhfaighidís seisiún ag clóscríobh. Déanaim cúrsa TTRS le cúpla páistí a bhfuil dyspraxia acu. (Special Education Teacher, School B)

Practical things like fine motor and gross motor skills, may they could do a session of touch typing. I do a TTRS (Touch, Type, Read, and Spell) course with a few pupils who have dyspraxia.

Using ICT in the classroom has been found to be a positive practice, as it can foster greater inclusion (Florian, 2014), promotes differentiated instruction and a creative learning environment, whilst it also supports teachers (Starcic, 2010; Starcic et al., 2013).

5.5.7 Differentiation/Universal Design for Learning.

Differentiation for example, through the Universal Design for Learning (UDL) framework involves teachers adapting the curriculum to the capabilities of the child. It provides alternative pathways for pupils to access teaching and learning in the classroom and to reach their potential. Teachers from all schools in the study stated how they taught all pupils the standard primary school curriculum using differentiation. During in-class observations, many positive examples of differentiation were seen. For example, in a senior class the teacher provided reading texts in Irish at varying levels for the pupils. All pupils were able to work independently at a level that was accessible for them. This practice of adapting resources to encourage independent learning was also observed in two other classrooms. Various forms of differentiation were observed (see Table 5.3), such as, less written work to be completed by pupils, different mediums of content delivery, different methods of providing answers, providing an extra photocopy to help with reading, and undertaking reading comprehensions orally. It is clear that the methods implemented are similar to those identified in a study on differentiation/UDL in French immersion education (Mady, 2018).

Table 5. 3 The methods of differentiation observed being used in schools participating in the present study.

- Uses body language, visuals, realia, manipulatives to communicate meaning.
- Uses a variety of pre-reading and pre-writing activities to make language and content more accessible.
- Selects and adapts instructional materials for learner’s developmental level. The spoken and written language used is accessible to all.
- Technical vocabulary is used only when necessary and is explained and practiced.
- Makes available a variety of target language reading and resource materials.

- Articulates and enunciates clearly.
- Slows down and simplifies language when developmentally appropriate.
- Rephrases and repeats messages in a variety of ways.
- Uses output orientated activities such as role plays, simulations, drama, debates, presentations, etc.
- Makes use of a variety of grouping techniques, such as paired work, group work, etc.
- Promotes learning from and with peers, e.g. peer tutoring, children help each other, seek clarifications etc.
- Reinforces concepts and language using a variety of learning styles such as visual, auditory, tactile, kinaesthetic etc.
- Differentiation of objectives, content, resources, expected responses.
- Appropriately adapted curriculum materials (e.g. large print, audio-visuals) are available for students with SEN through the medium of Irish.
- Resources are directed at encouraging independent learning.

Five of the class teachers (N=10) spoke in interviews about how they often used simple Irish language when working with pupils who have SEN. Interestingly, four of these teachers taught pupils with dyslexia, and one taught a pupil with SSLD. During the in-class observations, all teachers observed (N=8) slowed down their speech when appropriate and simplified the language used to make the content being taught accessible to pupils. These teachers were also observed rephrasing what they had said for the pupils to gain a better understanding of the concepts being taught. Two of these teachers (1 SSLD/1 dyslexia) gave pupils with SEN different spellings to their class peers, this they felt helped the pupils access the curriculum more efficiently. Three teachers of pupils with ASD explained how they differentiated the curriculum based on the needs of the child.

Bíonn idirdhealú i gceist insan rang ag brath ar na riachtanais atá ar na páistí sin ar ndóigh. (Class Teacher of Pupil 4, ASD, School D)

Differentiation takes place in the class depending on the needs of the children of course.

5.6 Academic Challenges

Academic challenges when learning through Irish were reported for pupils with SEN by 16 participants (N=34). These challenges included difficulties in mathematics and literacy. These are discussed in further detail below by category of SEN. It was said that pupils faced challenges in mathematics due to the academic language used and their difficulties in reading and interpreting mathematical questions. Previous research on IM education also found that more suitable resources (e.g. textbooks and mathematics resources) are needed for IM schools to help all pupils access the mathematics curriculum (COGG, 2010, NCCA, 2007a). One of the special education teachers gave an example of the difficulties that children with SEN experience when accessing the curriculum using textbooks.

Ceapaim go bhfuil na téacsleabhar i nGaeilge deacair le léamh go háirithe nuair a théann tú suas tríd an scoil go rang a trí agus a ceathair. Tá na leabhair staire agus eolaíochta agus iad sin, tá an Ghaeilge deacair agus tá go leor le léamh. (Special Education Teacher, School B)

I think that the textbooks in Irish are too hard to read particularly when you go up through the school to third class and fourth class. The history books and science and them, the Irish is too hard and there is a lot to read.

However, a special education teacher in a DEIS school in the RoI disagreed with this and stated that the pupils' difficulties in reading and accessing the curriculum did not affect their achievement in terms of history and geography.

This could be due to variations in the teaching methods used to teach these subjects, with some teachers placing less emphasis on reading and writing and more on practical activities in some classes.

Ceapaim go bhfuil a lán fadhbanna acu leis an léamh Gaeilge agus an scríbhneoireacht Gaeilge, but seachas é sin, ní cheapaim go ndéanann sé aon difríocht leis an stair nó an tíreolas nó aon rud mar sin.

(Special Education Teacher, School A)

I think that they have a lot of problems reading Irish and writing in Irish, but apart from that I don't think that it makes a difference with history or geography or anything like that.

5.6.1 Academic Challenges for Pupils with a SSLD and ASD.

For the category of SSLD, one parent of a pupil in an IM school (N=2) and one class teacher (N=3) said that pupils face challenges in mathematics and literacy due to them learning through a L2.

Ag léamh sumáí, fadhbanna sumáí sna leabhair mata tá an téacs agus an teanga tá sé deacair ... tá said ag iarraidh a bheith ag oibriú amach an Ghaeilge ar dtús.

(Class Teacher of Pupil 9, SSLD, School A)

Reading the sums, maths sums in the maths book, the text and language is hard... they are trying to work out the Irish first.

For the category of ASD, one class teacher (N=4) and one parent of a pupil with ASD in an IM school (N=4) said that these challenges were also experienced by this group.

He was saying that he thinks that mathematics would be easier if it was in English.

(Parent of Pupil 3, ASD, School C)

5.6.2 Academic Challenges for Pupils with Dyslexia.

Two parents of pupils with dyslexia in IM schools (N=4), two parents of pupils with dyslexia who have transferred to an English-medium school (N=3) and three class teachers of pupils with dyslexia (N=4) also reported these challenges. The parents of the pupils who transferred spoke about how their children had difficulty accessing the curriculum through Irish. One parent explained how their child struggled prior to their transfer (2nd Class).

He didn't know what the teacher was saying, he didn't understand any of the words in the books, he couldn't read the words, you know he couldn't read what was written on front of him. To be honest, he had given up on school all together. (Parent of Pupil D who transferred, Dyslexia/Dyspraxia)

All parents of pupils with dyslexia who transferred (N=3) spoke about how school has become easier for their children since they started learning through English. One parent explained the holistic development their child has experienced since they transferred.

His self-esteem and effort increased, but it depended on which year and which teacher but he quite well, his maths actually came on great and his spelling is still horrendous and that is still an issue for him, and he will never be able to spell but his reading has come on great (Parent of Pupil D who transferred, Dyslexia/Dyspraxia).

Three class teachers for this group (N=4) discussed how these pupils experience difficulties accessing the mathematics curriculum through Irish due to their literacy difficulties. One teacher gave a practical example of these difficulties.

An rud is mó domsa ná an mata. Muna féidir leat ceist a léamh, ní féidir leat an sum a dhéanamh, ach is féidir leat, an suimiú, an dealú ... sin an fhadhb domsa, beidh torthaí Drumcondra dóibh siúd nach bhfuil léitheoireacht maith acu sa Ghaeilge níos ísle, ach má léinn an triail mhata dóibh, go mbeidh an toradh níos airde.

(Class Teacher of Pupil 1 & 6, ASD/Dyslexia, School B)

The biggest thing for me is the maths. If you cannot read the question, you cannot do the sum, but you can add, subtract, and divide... that is the problem for me, the results of the Drumcondras³(tests) for those who aren't good at reading in Irish will be lower, but if you read the maths test for them, the results will be higher.

The difficulty these students face when accessing the curriculum through Irish as a L2 relate to the international research reviewed regarding the need for greater levels of exposure to a L2 to acquire higher levels of proficiency. For children with language-based difficulties it has been found that there is a need for them to have higher levels of consistent exposure to a L2 to develop proficiency (Kay-Raining Bird et al., 2016). This has specifically been highlighted as a factor for sequential bilinguals which the majority of pupils participating in the study were.

5.7 The Challenge of Irish Language Acquisition

Almost two thirds (n=23) of participants (N=34) stated that the Irish language acquisition was challenging for children with SEN. The breakdown of these participants is discussed in further detail below based on the categories of SEN included in the study. Principals (n=3) and special education teachers (n=3) spoke about how children with SEN are often slower at acquiring their L1, and therefore are possibly going to be slower at acquiring Irish as a L2. One teacher spoke about their experience of this.

Déanann daoine dearmad go bhfuil na páistí seo ar an iomlán níos moille ag foghlaim an Bhéarla ar an chéad dul síos, so bíonn orainn níos mó ama a thabhairt dóibh an Ghaeilge a fhoghlaim, agus déanann daoine dearmad air sin. (Special Education Teacher, School C)

People forget that firstly on a whole these children are slower at learning English, so we need to give them more time to learn Irish and people forget that.

5.7.1 Irish Language Acquisition for Pupils with ASD.

For those attending IM schools with ASD, two class teachers (N=4) and two parents (N=4) referred to this as a challenge. One teacher explained that like children with SSLD these pupils can often be slower at understanding and speaking Irish.

Uaireanta bhíonn siad beagáinín níos moille ag labhairt na Gaeilge, or beagáinín níos moille ag tuiscint an teanga. (Class Teacher of Pupil 2, ASD, School C)

Sometimes they are a bit slower at speaking the Irish language, or a bit slower at understanding the language.

The difficulties that pupils with ASD experience with the Irish language were explained further by one of the teachers (Class Teacher of Pupil 3, ASD, School C).

Nuair a éiríonn siad faoi bhrú, nó má tá frustrachas orthu chailleann siad an teanga Gaeilge más é an Bhéarla an mháthairtheanga atá acu.

When they are under pressure or frustrated, they lose the Irish language if English is their mother tongue.

Cosúil le an-chuid páiste freisin, an syntax den abairt, go measctar suas é go minic agus ceapaim go bhfeictear sin píosa beag níos mó.

Also like a lot of other children, the syntax of the sentence, they mix that up regularly and I think that you see that a little bit more.

International research on the ability of children with ASD to acquire a L2 also shows that children with ASD can acquire proficiency in a L2 (Hambly & Fombonne, 2013; Ohashi et al., 2012; Petersen et al., 2012; Reetzke et al., 2015; Sen & Geetha, 2011; Valicenti-McDermott et al., 2013). Nevertheless, it is important to remember that the level of L2 proficiency that they acquire will be based on their L1 abilities. This concept has been further reinforced by the findings of this research. Furthermore, it is important to note that their ability to acquire a L2 can be impacted by the characteristics of their ASD diagnosis. For example, two of the parents of pupils currently enrolled in an IM school (N=4), and the parent of a pupil (N=1) who had transferred to an English-medium school, spoke about how their child's oppositional behaviour impacted on their Irish language development.

I don't know if he finds it hard, but he just refuses to, because...
I don't know if it's because he feels it's being pushed on him, or because everything he says as Béarla, (in English) they repeat as Gaeilge (in Irish). (Parent of Pupil 2, ASD, School C)

The parent of the child who transferred also spoke about their experience of this oppositional behaviour.

He actually had a Canadian teacher when he started first (in the English-medium school), and he'd only speak Irish to her and she didn't have any Irish. (Parent of Pupil B who transferred, ASD)

Oppositional behaviours are common in children with ASD (Mandy et al., 2014). Consequently, the above examples of the pupils being unwilling to speak Irish in school, or the example of the pupil who only spoke Irish to their teacher

who had no understanding of Irish is not surprising. Hence, this may be due to the oppositional characteristics associated with ASD rather than an inability to acquire a L2.

5.7.2 Irish Language Acquisition for Pupils with Dyslexia.

For the group of Pupils attending IM schools with dyslexia, all the class teachers interviewed (N=4) and three of parents (N=4) stated that acquiring the Irish language can be challenging for these pupils. It was said that these pupils often get confused between Irish and English, the examples given included spellings, grammar, and phonics.

She'd be doing it as I (the letter) in English and she wouldn't be doing it in Irish. There's a difference between what she's trying to do, and she gets herself confused and conflustered, so I sort of have to help her a bit. (Parent of Pupil 7, Dyslexia, School C)

It's the lost in translation piece a small bit through reading. If he has to read the question himself, he'd get lost in the translation of it, I suppose, where if it's read out to him he can understand the spoken... even in Irish a little bit easier and then if you translate it to English completely there's no problem. (Parent of Pupil 6, Dyslexia, School B)

It is important to note that a parent of a child with dyslexia and dyspraxia who transferred their child to an English-medium school, stated that this was one of the primary reasons that lead to the transfer. One parent described why they made this decision.

In fairness, he was getting the Irish sounds and the English sounds all mixed up, 'v' and 'bh' he couldn't, a 'v' in Irish and a 'bh' in English. He just, he really really super struggled and like they were getting to the stage where they weren't allowed talk English on yard, and sure he couldn't speak Irish at all, so he was always in trouble, always

at the wall. (Parent of Pupil D who transferred, Dyslexia/Dyspraxia)

It is common for children with dyslexia to experience difficulties and confusion with letter sounds, connecting letters to sounds, reading, and writing. This is a characteristic of their difficulty. However, as the Irish language has a more transparent orthography, it would be expected that they find it easier to learn (Hickey & Stenson, 2011). One approach suggested to help these children is for them to strengthen their phonological understanding in their mother tongue prior to commencing reading and writing in their L2 (Nijakowska, 2010). During this time, an emphasis could be placed on the pupil's oral and aural L2 development. Home language interventions have been shown to be beneficial in international research as they enable parents who may lack proficiency in the school's language of instruction to be active in their child's education (Ijalba, 2014).

5.7.3 Irish Language Acquisition for Pupils with SSLD.

All the class teachers (N=3) and parents of pupils with SSLD (N=2) participating in the study said that this area was challenging for these children. References were made (1 parent/3 class teachers) to the fact that these pupils are often slower at speaking Irish. One teacher gave an example of the Irish language development of pupils with SSLD over time.

Ansin tar éis tamaill, feiceann tú tuigean siad gach rud ach fós labhraíonn siad i mBéarla leat ach ansin tosaíonn siad ag cur cúpla focal agus abairtí le chéile.

(Class Teacher of Pupil 11, SSLD, School D)

Then after a while, you see that they understand everything, but that they still speak English to you, but then they start to put a few words together and sentences together.

These findings are comparable to international research that found that children with SSLD are slower to acquire a L2 (Blom & Paradis, 2013; Kay-

Raining Bird et al., 2016; Paradis, Schneider & Duncan, 2013; Rezzonica et al., 2015). This is especially the case in terms of sequential bilinguals, which the pupils participating in this study are (Verhoeven et al., 2011a, 2011b). Findings also show that the level of L2 proficiency acquired by these bilinguals depends on their level of exposure to the L2 and their L1 abilities. Therefore, it is of no surprise that these pupils are slower at learning Irish as a L2 as they may only be exposed to Irish for the school term (183 days a year), for about a quarter of the day (6 hours) when in school. Thordardottir (2011) states that children without SEN need to be exposed to a L2 for 60% of the day to gain a high level of proficiency. Therefore, greater exposure to the Irish language is needed by these pupils outside of school hours.

5.8 The Challenges of IM Education for Pupils with SEN faced by Parents

In this section of the results the challenges that are faced by principals, teachers, and parents when meeting the needs of pupils with SEN through the medium of Irish are reviewed. Participants spoke about the challenges they face in terms of parental concern, parental involvement, resources, assessment, interventions, and recognition of IM education. The challenges participants face in terms of resources, assessment, intervention, and recognition of IM education coincide with the findings regarding the additional supports that schools require. Therefore, these factors will be presented in the section on the additional supports required.

5.8.1 The Suitability of IM Education for Children with SEN.

The attitude of external professionals, such as, educational psychologists, speech and language therapists, and occupational therapists towards IM education for children with SEN can often be negative. As mentioned previously, internationally there is a practice of advising parents against raising their child with ASD bilingually (Hampton et al., 2017; Jegathessan, 2011; Kay-Raining

Bird et al., 2012; Kremir-Sadlik, 2004; Lim et al., 2018; Wharton et al, 2000; Yu, 2013). In this study, it was found that this practice is common for children with ASD, SSLD, and dyslexia. Two of the special education teachers interviewed discussed how it is often the case that pupils with SEN are advised to transfer from IM education to English-medium education with little consideration for the impact that this has on the family.

An chéad rud a chaithfidh athrú i suppose ná meon na teiripeoir agus na síceolaithe, because I suppose loiteann sé ...má dhéarann siad le tuistí níl sé seo chun oibriú, seans maith go dtarraingeoidh na tuistí amach iad nó seans go mbeidh meon éagsúil acu, nó seans go mbeidh siad neirbhíseach faoi, agus nach mbeadh an muinín céanna acu. (Special Education Teacher, School C)

The first thing you need to change is the attitude of the therapists or the psychologists, because I suppose it ruins.... If they say to parents this isn't going to work, there is a chance that they will withdraw their child or that they will have a different attitude, or that they might be nervous, and they wouldn't have the same confidence.

5.8.1.1 Pupils with ASD.

The parents of two pupils with ASD currently enrolled in IM schools, who had speech and language difficulties, were advised that they should transfer their child from an IM school due to their SEN. One of these parents said that they were advised by almost everybody that they met to transfer their child to an English-medium school due to the extra pressure a L2 would place on their child.

Once we found out he had autism, I mean, it was practically, he has autism, think of another school. Like, it was practically the next sentence, you know, from the professionals. So, the speech therapist in particular had said, you need to look at an English school. (Parent of Pupil 3, ASD, School C)

One of these parents decided to do some research into the suitability of IM education for all pupils and having read the research they decided not to transfer their child as the level of inclusion and standard of education was very high in the IM school and this parent had other children attending this school.

So, I went and did some research myself and we just said, look, he's so comfortable here. His brother is here, the teachers are fantastic, the resources are going to be in place for him. So, we just said, look, we'll see how he gets on, and we haven't looked back since. They've been fantastic, so that's him. (Parent of Pupil 2, ASD, School C)

The second parent decided to send their child from an IM preschool to an IM primary school on the advice of the teacher in the IM preschool. At the time there were questions about the suitability of IM education for the child, with professionals advising against it. This parent decided to go and observe their child in the IM preschool. They were happy that their child was learning through Irish. Hence the parent went against the opinion of the speech and language therapist and sent their child to an IM primary school.

So, she went out (the speech therapist) and she said, no, that child doesn't understand a word. He's following sign language. He's following kind of visual cues from the people. He doesn't understand, you'll need to lower your expectations for this child and put him into the school next door. (Parent of Pupil 3, ASD, School C)

It is important to note that both of these pupils attended the same IM school. The advice one parent had for parents of children with ASD considering IM education was to follow your instincts.

You need to talk to them; you need to see the environment that they're in. Once you see it, it's not so scary anymore. And the fact that the kids are able to communicate, and they're not just left there

totally oblivious because the teacher is talking as Gaeilge (Irish), it's not like that at all. (Parent of Pupil 2, ASD, School C)

The second parent praised the school for their positive practices and willingness to learn and equip themselves to help children with SEN. This parent said that this is one of the reasons why her child could successfully navigate through IM education.

They looked at autism and then they also educated themselves on (CHILD'S NAME) in particular as well. What are his strengths? What are his needs? What motivates him? So, like, I just can't speak highly enough of them. (Parent of Pupil 3, ASD, School C)

The other two parents of the ASD cohort, were not advised to transfer their child, both of these parents said that their child did not experience any language-based difficulties. The challenges their child experienced centred around behaviour, social relationships, and change. No pupils from a DEIS school were represented in this group.

5.8.1.2 *Pupils with Dyslexia.*

Of the parents in this group who undertook an interview (N=3), two of them said that it had been suggested that their child should transfer from IM education due to their SEN (one private and one public assessment). The parent of the pupil who was assessed and diagnosed privately said that the minute her child was diagnosed, the psychologist suggested that IM education was not suitable.

Very much, immediately on the day of his assessment. My husband went with him first and I was calling out later and from the form we filled out beforehand before she even met the child she went, that's it, get him out of there. (Parent of Pupil 6, Dyslexia, School B)

The parent whose child was assessed and diagnosed in school, said that their child had a speech delay when younger, and when this was established,

they were advised by the speech and language therapist that they should speak only one language (English) to their child so as not to cause them confusion, delay their speech further, or place an extra burden on them.

Míníodh gur Ghaeilge amháin a bhí mé féin mar tuismitheoir ag labhairt léi agus beagáinín ó mo bhean chéile agus dúradh linne ag an am seo ón gcomhairleoir cainte, ón teiripeoir cainte, dúirt sí linne gur cheart dúinne díriú ar theanga amháin nó ar Bhéarla, agus gan a bheith ag labhairt i nGaeilge nó go mbeidh sí meascaithe suas, agus cuirfidh sé sin moill uirthi ag caint.
(Parent of Pupil 8, Dyslexia, School D)

I explained that Irish was the only language that I as a parent was speaking to her and a small bit from my wife and they said to us, the speech and language therapist, she said that we should focus on one language, or on English, and not to be talking to her in Irish or she will be mixed up and it will slow her speech down.

This parent was raising their child through Irish mainly with some English spoken in the home. They said that they continued raising their child through Irish, which is not the majority language of their community after they had done some research into studies on bilingualism and its suitability for all pupils. Interestingly, the parent in this cohort who was not advised to transfer their child to an English-medium school, spoke about how their child was better at Irish than at English in school.

No, never. The advice was to leave her there, because her Irish is better than her English. For her pronunciation and her speech, her language. (Parent of Pupil 7, Dyslexia, School C)

This may be because the orthography of the Irish language is more transparent and therefore easier to learn to read in as mentioned previously.

5.8.1.3 Pupils with SSLD.

One of the parents that were interviewed (N=2) said that it had been

recommended that their child transfer to a school with access to a speech and language therapist. But due to this parent's interest in IM education and the Irish culture they decided not to transfer their child, hence their child is not receiving the same level of support. The other parent said that it was never recommended that their child should transfer to an English-medium school.

Abair agus tú ag freastal ar scoil leis an ionad sin oibríonn an teiripeoir cainte ansin ceithre lá sa tseachtain so bíonn an tacaíocht sin ar fháil, beidh sé ag imeacht óna chuid ranga agus ag dhéanamh ranganna áirithe leis an teiripeoir cainte sin. Faoi láthair faigheann muidne seisiún amháin sa tseachtain ar feadh bloc de sé seachtaine agus ansin bíonn sos de thart de trí mhí aige.
(Parent of Pupil 11, SSLD, School D)

Say you were attending the school with the unit, the speech and language therapist work there four days a week, he would be going from his class and doing specific classes with the SLT. At the moment, we get one session a week for a block of six weeks and then we have a break of about three months.

5.8.1.4 Pupils with SEN who have transferred from IM schools.

It was suggested to four of the parents (N=6) in this group that their child should transfer. Three of these parents spoke about how this recommendation was made to them immediately when their child got a diagnosis. One of the parents discussed the reasons given for this suggestion to transfer.

They were a bit concerned thinking Irish would be harder for (CHILD'S NAME) to learn all the other stuff. That was their general concern but they're like that in special needs anyway. (Parent of Pupil a who transferred, ADHD/MGLD/Mobility)

One of the other parents said that they were advised to transfer by the educational psychologist and the school principal to transfer. Another parent was told by their child's resource teacher that they were struggling in IM education.

An educational psychologist told the final parent in this group that the IM school was unsuitable for their child.

5.8.2 Parental Concern.

International research has shown that parents of pupils with ASD often suffer from concern and anxiety around the suitability of bilingualism for their child. The research states that parents of children with ASD experience concerns regarding: (i) access to professional help or services for their bilingual child, (ii) their child’s ability to learn two languages, and (iii) whether bilingualism would confuse their child and delay their language development (Hampton et al., 2017; Jegathessan, 2011; Kay-Raining Bird et al., 2012; Yu, 2013). The findings of the present study also show that these concerns are experienced by parents of pupils with ASD, SSLD, and dyslexia in IM schools. Two school principals (N=4) and one special education teacher (N=4) spoke about how they experienced parental concern in their day to day work. One principal provided an example of the concern parents have.

Bíonn tuismitheoirí scanraithe agus cuireann cuid mhaith acu ceistanna orainn an chóir dúinn iad a tharraingt amach as an ngaelscoil, agus iad a chur go scoil Bhéarla.	The parents are scared and a lot of them ask us if they should take their child out of a gaelscoil and send them to an English school.
(Principal, School B)	

Parents (n=6) of pupils with SEN attending an IM school (N=9), and parents (n=4) who transferred their child with SEN to an IM school (N=6) referred to being concerned that they had made the right educational choice for their child.

The parents of pupils with ASD in IM schools who had children with speech and language difficulties (n=2) spoke about their concerns about educating their child through Irish. The concerns started for these parents when they were advised by educational and healthcare professionals that IM

education may not be a suitable form of education for their child. Both parents were advised to send their child to an English-medium school immediately when they received a diagnosis of ASD. They were unsure of what to do when faced with the decision. One parent explained the gravity of their final decision.

It was a huge leap of faith, it really was, because you’re going against the advice of professionals. (Parent of Pupil 3, ASD, School C)

However, in the end, these parents were happy that they had made the right decision for their child. Both children attended the same school and both parents praised the school for their work with the children.

I can only comment on this school, but I just can’t speak highly enough of them. They’ve... you know, as I’ve said before, it is like I have a team behind us, or we have a team behind us. You know, from the moment in naíonra that we said, look, we’re going to take a chance, that was it. You know, they mobilised an army. (Parent of Pupil 3, ASD, School C)

For the cohort of parents of pupils with dyslexia, two of the parents (N=4) expressed similar concerns to the parents in the category above. Both parents were also advised by educational professionals to refrain from sending their child from an IM school. One of the parents was raising their child through Irish and explained their concerns.

Chuir sé sin inní ormsa fásta, agus just mar thuismitheoir, bhí muidne buartha, well an bhfuil sí faoi mhí-bhuntaíste? B'fhéidir go bhfuil a gcuid Gaeilge níos forbartha ná a chuid bhéarla agus nuair a bhí speisialtóirí ag teacht isteach ag plé léi (as Béarla), b'fhéidir nach raibh siad ag tabhairt súntas nó aitheantas don forbartha atá aici sa Ghaeilge.

(Parent of Pupil 8, Dyslexia, School D)

It made me worry also, and as a parent, we were worried, well is she at a disadvantage? Maybe her Irish is more developed than her English and the specialists were coming in and dealing with her (through English), maybe they weren't recognising the development she was making in Irish.

All the parents of pupils with SSLD (N=2) interviewed who had children enrolled in an IM schools had concerns. Two teachers of pupils (N=3) in this category also referred to the concerns that parents have when sending children with SSLD to an IM school. One of the parents in this group described the source of their concerns.

Déarfainn just mar gheall go bhfuil a fhios agam go bhéis an cuidiú agus an tacíocht sin ar fháil dá mbeadh sé ag freastal ar scoil bhéarla agus ag an tús bhí mé faoi cineál an dabht sin, an bhfuil an rogha ceart déanta agam? (Parent of Pupil 11, SSLD, School D)

I would say that it is just because I know that the help and support that would be available if he was attending an English school, and at the beginning I kind of had that doubt, have I made the right decision?

The second parent in this group spoke about how they were also concerned about whether they made the right choice for their child, this is a concern that had played on their mind for a long time. This parent came to the conclusion that they would keep their child in the IM school due to the positive practices in place to meet her child's needs and the level of attention and care that they were getting. Nevertheless, they did discuss the difficult days they experienced;

Did I pull my hair out? At certain times I did, yes! (Parent of Pupil 9, SSLD, School A)

5.8.3 Parental Involvement.

Parental involvement was challenging particularly for the cohort of parents (n=3) and teachers (n=2) of pupils with dyslexia. These participants found this challenging due to the lack of Irish language proficiency the parents had and its impact on their ability to help their child with their schoolwork. For one parent their lack of ability in Irish made them feel guilty.

I suppose our lack of ability in Irish is probably sometimes maybe it's just the mommy guilt that I feel that maybe coming against him a small bit. (Parent of Pupil 6, Dyslexia, School B)

The other parent in this group wanted to be educated on the strategies to help their child learn. Two parents of pupils with dyslexia in an IM school said they often used Google translate or the internet to help their child with their homework. One of the parents of the pupils with SSLD attending an IM school also offered a suggestion as to how they could be further empowered to help in their child's learning.

I don't have the patience for it. But would I be able to teach him? Yes. I'm highly intelligent myself, you know, I come from a highly intelligent family.... I need to be taught how to teach, if you know what I mean. (Parent of Pupil 9, SSLD, School A)

A parent of a pupil in an IM school with ASD and one special education teacher also mentioned that parental involvement could be difficult due to the parents not having Irish language proficiency. These findings correspond with those of international and national research in terms of a lack of parental proficiency in the school's language of instruction being a barrier to parental involvement for all children regardless of whether they have a SEN (Kavanagh, 2013; Kavanagh & Hickey, 2013; Ó Duibhir et al., 2015).

5.9 The Additional Support Required by Pupils with SEN.

Participants were asked what additional supports were required by pupils with SEN in IM schools. As mentioned in the previous section, the additional supports of Irish language resources, assessment, and interventions are intertwined with the challenges faced by stakeholders in IM education when educating pupils. Subsequently, the challenges of these issues will also be discussed in this section.

5.9.1 Resources.

Access to resources were cited by principals, teachers, and parents as a challenge and an additional support that is required. Nevertheless, two principals (N=4) and one class teacher (N=10) spoke about how they have seen an improvement in the creation of resources for pupils through Irish and they praised An Chomhairle um Oideachas Gaeltachta agus Gaelscolaíochta (COGG) for their work in this area.

Tá a fhios agam go bhfuil COGG tar éis an-chuid obair a dhéanamh air sin agus an-chuid airgid a chur ar fáil chuig comhlachtaí chun níos mó acmhainní a chur ar fáil agus a dhéanamh. Tá feabhas cinnte tar éis teacht ar cúrsaí. (Principal, School A)

I know that COGG have done a lot of work in this and that they have made a lot of money available to companies for make more resources available. The situation has definitely improved.

Fifteen participants (N=34) spoke about the need for more resources through the Irish language. This cohort consisted of three school principals (N=4), three special education teachers (N=4), six class teachers (N=10), one parent of a pupil enrolled in IM education (N=9), and two parents of pupils who transferred (N=6). A parent of a child with ASD who transferred to an English-medium school with a special class suggested that more of special classes should be available in IM schools. A parent of a child with dyslexia and dyspraxia

who transferred discussed the benefits of Reading Recovery which is not widely available in all schools, and a parent of a child with SSLD enrolled in an IM school spoke about the need for more appropriate reading resources to be available through Irish. Of the teachers and principals (N=18) who reported this need (n=12), specific suggestions were made regarding more appropriate reading resources (n=4), touch typing courses for the Irish language (n=1), videos and social stories through Irish (n=1), and resources to help parents with homework and reinforce school work undertaken (n=2). The lack of resources available was previously highlighted as an issue in studies a decade ago (NCCA, 2007; COGG, 2010). The lack of educational programmes available for pupils with SEN through Irish was referred to by two participants. One special education teacher highlighted how this impacted on their work.

Tá an méid sin gur féidir leat a dhéanamh leo, a bhfuil research based agus tá siad ag rá gur caithfidh gach rud a bheith research based, so aon rud atá tú ag déanamh as Gaeilge, níl sé research based, tá sé just rud atá an múinteoir ag déanamh iad féin. (Special Education Teacher, School A)

There is loads that you can do with them that is evidence based and they are saying that everything needs to be evidence based so anything you are doing in Irish, it is not evidence based, it is just the teacher doing them themselves.

One teacher had a practical example of how the challenges of resources through Irish could be overcome within the teaching community, as a lot of teachers create their own resources.

Banc áiseanna a cruthú a bheidh fóirsteanach do gach aon duine agus b'fhéidir iad a roinnt agus rudaí mar sin. (Class Teacher of Pupil 4, ASD, School D)

To create a bank of resources that would be suitable for everyone and maybe to share them.

5.9.2 ICT resources for pupils with ASD.

Four class teachers of pupils with ASD (N=4), one school principal (N=4), and one SNA (N=1) spoke about the need for more ICT resources to be made available through the medium of Irish for pupils with ASD. They said that there was an abundance of ICT resources available in English, but little through Irish. Participants spoke specifically about how valuable these resources would be for pupils. One principal gave an example of how these resources help schools and pupils on a practical level;

Mar a dúirt páiste liom an lá deireanach, 'tá sé sin ag teastáil uaim but ní maith liom daoine'. So, chaithfidh muid aitheantas a thabhairt do sin freisin. An bhfuil bealach eile gur féidir an bhrú sin a laghdú? You know an ionchur, an chaint leanúnach sin a bhíonn ag dul ar aghaidh sa rang príomhshrutha go minic. (Principal, School C)

As one child said to me the last day, 'I want that, but I don't like people.' So, we need to recognise that too. Is there another way to reduce that pressure? You know, the input, the constant talking that goes on in the mainstream classroom.

This viewpoint is consistent with that of international research, where it has been found that the use of ICT is less socially threatening for pupils with SEN than personal interactions in the classroom (Clark et al., 2015; Goodwin, 2008; Rajendran et al., 2005). The findings of this research suggest that there is a need for more ICT resources through Irish to be made available for pupils with ASD for them to be able to overcome the dilemmas of identification, curriculum access, and location whilst maintaining the ethos of IM education (Starcic & Bagon, 2014; Norwich, 2008). Through the production of more resources through Irish teachers in IM schools will be better supported, differentiation of classroom instruction will be easier, and a creative learning environment will be promoted (Starcic, 2010; Starcic et al., 2013).

5.9.3 Learning support through Irish.

The need for learning support to be available through Irish and for Irish literacy was stated by participants (N=5) from each school. This group included one class teacher (N=10), two special education teachers (N=4), and two school principals (N=4). One special education teacher explained the importance of providing this support through Irish;

Tá gach ábhar ar súil acu trí Ghaeilge, stair, tíreolaíocht, mata, agus muna thugann muid cabhair dóibh a bheith in ann léamh, scríobh, agus litriú a dhéanamh tríd an Ghaeilge, ní éireoidh leo sa chóras. (Special Education Teacher, School C)

Every subject they do is through Irish, history, geography, maths, and if we don't give them help to read, write, and spell through Irish, the system will fail.

Two of the schools were providing learning support in Irish literacy and in curricular subjects through Irish, but two schools did not have the resources to do this. As mentioned previously, the school located in NI did not have a full-time SENCO to undertake additional teaching support with pupils. They only had a peripatetic teacher coming to the school to give support to pupils in English literacy. This in turn meant that pupils with SEN had to wait until they started reading in English to get this intervention. Whilst one special education teacher in a school in the RoI explained why they weren't undertaking learning support through Irish.

Ag an nóiméad táimid just ag cur an-tábhacht ar an Bhéarla agus an mata, agus níl ar an Ghaeilge. Tá sé deacair fiú é sin a dhéanamh, agus gach duine ar fáil leis sin. (Special Education Teacher, School A)

At the minute we are just placing emphasis on English and maths, and not on Irish. It is hard to even do that, and to cover everybody with that.

International best practice states that bilingual interventions are most

effective for children with SEN who have two languages (Ebert et al., 2014; IASLT, 2016; Pham et al., 2015; Restrepo et al., 2013; Thordardottir et al., 2015; Tysbina & Eriks Brophy, 2010). It is clear from the findings of the survey in stage one and those of the case studies, that not all schools offer support to students in the language of the community (English) and school (Irish). The benefits of bilingual interventions internationally have shown that dual language programmes have longer term benefits than monolingual interventions and also had benefits for both languages being used by the child (Ebert et al. 2014). These interventions allow for the child's development in both languages to be monitored. For example, monolingual programmes where sequential bilingual children received intervention in their L2 (the local community language) led to a development in the child's L2 but had no impact on their L1 (minority language) (Ebert et al., 2014; Pham et al., 2015; Restrepo et al., 2013; Thordardottir et al., 2015; Tysbina & Eriks Brophy, 2010). This factor may have implications for IM schools as Irish is a minority language and pupils receive less exposure to it. Therefore, it would be prudent for IM schools to offer additional support to pupils in Irish and Irish literacy, thus providing bilingual interventions as recommended (IASLT, 2016). This is also important for dyslexic bilingual children as research has shown that there may be limited cross linguistic transfer of skills for these children.

5.9.4 Assessment.

Appropriate assessment through the medium of Irish was cited by nine participants (N=34) as a challenge. This cohort included one school principal (N=4), three special education teachers (N=4), one class teacher (N=10), and four parents of pupils in IM schools (N=9). Of these participants, seven spoke about the challenges of assessing pupils with SEN through Irish. Two of these were parents of children with dyslexia. One of these parents reported that their child had more difficulty doing standardised tests through Irish and often scored lower on these tests than the English version. This often caused the parent anxiety. The other five participants (two principals, one SE teacher, one

class teacher SSLD, one class teacher dyslexia) reinforced this viewpoint and discussed how it was difficult to appropriately assess pupils using tests solely in English, as pupils are being educated through Irish. The principal of School B explained the difficulties they experience;

Fiú rud chomh simplí leis na Drumcondras.
Faighim go bhfuil an teanga iontu siúd, nach
é an teanga nádúrtha laethúil é i nGaeilge
agus ceapaim go gcuireann sé sin b'fhéidir
bac ar chuid de na páistí.

Even something as simple as the
Drumcondras. I find that the language used
in them is not the natural daily Irish language
used and I think that this is an obstacle for
some of the children.

The need for more assessments to be made available through Irish has been reported since 2007 (COGG, 2010; NCCA, 2007; Ní Chinnéide, 2009; Nic Gabhann, 2010; Ó Duibhir et al., 2015). International best practice shows that bilingual pupils should be assessed in both of their languages to evaluate their full linguistic abilities (De Lamo White & Jin, 2011; Ebert & Kohnert, 2016; Gutiérrez-Clellen & Simon Cereijido, 2010). Suggested methods for appropriate assessment include dynamic assessment (Ebert & Kohnert, 2016; Kapatzoglou et al., 2012; Martin, 2015; Pena et al., 2014; Pena et al, 2001), parental reports (Grimm & Schulz, 2014; Paradis et al., 2013), and narrative sampling (Bedore et al., 2010, Costanza-Smith, 2010, Cleave et al. 2010; Gutiérrez-Clellen et al., 2008). These informal methods of assessment should be utilised by teachers in schools. The provision of training and education in these areas for teachers would be beneficial. The development of standardised tests for English – Irish bilingual children is also needed to guarantee an accurate and reliable assessment of language development (O'Toole & Hickey, 2013).

5.9.5 Professional Development.

Participants (n=11) spoke about the need for additional training to be made available to teachers and SNAs. This cohort included one school principal

(N=4), one special education teacher (N=4), three class teachers (N=10), two parents of pupils enrolled in IM schools (N=9), and four parents of pupils who transferred (N=6). One principal spoke about the need for parents and teachers to be educated on bilingualism, immersion education, and SEN.

Má tá muid in ann an tacaíocht sin a chur ar fáil dár gcuid múinteoirí, tríd an eolas a roinnt leo agus tríd na hacmhainní taighde a roinnt leo. Ceapaim gur gné ana tábhachtach é sin, ní leor gur féidir oiliúint a chur ar fail dóibh ó thaobh na ndeacrachtaí éagsúla.

(Principal, School C)

If we can support our teachers through the sharing of knowledge and through sharing the research resources with them. I think that this is a very important aspect, there is not enough training available for them in relation to the different (educational) difficulties.

The teachers (N=2) and principal (N=1) of two pupils with ASD in an IM school said that it was often difficult for teachers to obtain a place on SEN courses and that when they did, they had no element of SEN training for teachers in a bilingual setting. The principal spoke about how often course facilitators aren't equipped to deal with questions regarding SEN in IM education. All three of these participants said that they have had a negative experience at a course when they said that they worked in an IM school and taught pupils with ASD.

Níor chreid éinne go rabhamar ansin ó Ghaelscoil le haonad le páistí le uathachas agus cheap siad actually go rabhamar ag déanamh níos mó damáiste do na páistí sin ná aon rud.

(Class Teacher of Pupil 3, ASD, School C)

They did not believe that we came from an Irish-medium school, and they thought that we were doing more damage to the children than anything.

Two parents of pupils with ASD (one in IM schools/one withdrawn from IM school) spoke about how they felt that teachers and SNA's could benefit from

additional training to help working with children who have SEN. The parent of the child currently attending IM education gave an explanation for this suggestion.

The speech and language and the occupational therapist could teach them so much, as well. And then they could do the same, offer the same things to the kids. Because they're not trained enough, I don't think.

(Parent of Pupil 2, ASD, School C)

This opinion was mirrored by a parent of a child with SSLLD in an IM school, who also felt that if teachers and SNAs had more training, then they would be better able to help their child with their speech development. The need for further development in the area of bilingual special education for teachers has also been highlighted internationally (Casey et al., 2013; Rodriguez, 2005). To date the availability of teacher education in this area is limited in the RoI and NI. The primary components of a successful course in this area are; (i) proficiency in both languages, (ii) assessment, (iii) culture, (iv) planning and delivery instruction and, (v) professionalism (Rodriguez, 2005). The need for more teacher education and training in this area has highlighted in studies a decade ago (COGG, 2010; Ní Chinnéide, 2009). Appropriate teacher education in this area would reduce unrecognised biases (Pugach & Blanton, 2012), disproportionate referrals of SEN (Artiles et al., 2010), and misconceptions on L1 and L2 development (Paneque & Rodriguez, 2009). Suitably educated teachers who are competent at utilising SEN teaching pedagogies produce higher achieving pupils (Feng & Sass, 2010).

5.9.6 The Availability of External Services through the Medium of Irish.

Five of the parents of pupils with SEN (N=9) attending IM education spoke about the need for the services being provided by external services (e.g. speech and language therapist, occupational therapist) to be available through the medium of Irish for pupils. The need for these services to be made available has been referred to in previous research a decade ago (COGG, 2010; Ní Chinnéide,

2009). One parent of a pupil with ASD (N=4) spoke about how their child finds it difficult to re-focus their attention once school has ended and they are attending speech and language therapy. They feel that it would be of benefit to children in these services are run in conjunction with the school.

And there's no Irish whatsoever. It's like, are you serious? I've already done this today. I've got more work now; you're making me do more work. It's like, he just totally shuts down and won't engage in it. I think if those resources could come into the school. (Parent of Pupil 2, ASD, School C)

This viewpoint coincides with the introduction of a pilot programme by the Government of Ireland, where speech and language therapists and occupational therapists are beginning to work in preschool and primary schools as part of an early intervention programme (see DES, 2018 for further details). A limited number of IM schools were included in this pilot stage.

Two of the parents (N=3) of pupils with dyslexia said that their child would benefit from extra literacy support through the medium of Irish. One parent was considering sourcing extra tuition in this area for their child. The other parent already had their child enrolled in dyslexia tuition classes. One parent spoke about why Irish language interventions were needed.

They're learning Irish in school, but she's doing this class in English. ...So, if they were to do that with four or five of each class, do it through the Irish medium, it would be a lot better for her. (Parent of Pupil 7, Dyslexia, School C)

The two parents of children with SSLD spoke about how speech and language therapy through Irish would be good for their child as it would reinforce what their child is learning in school. One parent said that they are able to help their child through English and that they would benefit from this intervention through Irish as they do not speak Irish fluently themselves.

It'd be more beneficial to him, and because he's learning in Irish he would get more benefit than in English. (Parent of Pupil 9, SSLD, School A)

5.9.7 The Progress of Pupils with SEN who have Transferred from IM Education.

Parents (N=6) of children who had transferred from IM education due to their SEN were asked whether their child found it easier learning through English. Five parents spoke about the academic advantages that their child experienced from learning through English. The advantages they listed included; the holistic development of their child, increased self-esteem, increased effort with schoolwork, and improved results on standardised tests. An example of how this change positively influenced their child's learning when they transferred to an English-medium post primary school explained by one parent.

It's definitely easier for him and he's managing much better and he's doing well in subjects like history and English. I think if he was having to learn all that through Irish as well, the spelling just kills him altogether. It's definitely easier for him. (Parent of Pupil F who transferred, Dyslexia/Dyspraxia)

Three of the parents felt that the English-medium education was better able to cater for the needs of their child. One of the parents said that the class sizes were smaller in the English-medium post-primary school their child attends now and that there are many pupils with SEN in the school. This had a positive impact on their child in terms of inclusion and feeling the same as everybody else. Two parents said how they did not feel that it was the language of the school that was the main issue, rather the school's lack of understanding of SEN provision. An explanation of this was given by one of the parents.

I think what happens in these schools is that for the most part, parents send their children to Irish-speaking schools if they don't have any real needs in terms of behaviour or special education in

general or specific learning difficulties and I think therefore they don't get the range, so they don't know how to deal with the range. They don't learn how to deal with the range. I think that's what happens. (Parent of Pupil C who transferred, Dyslexia/Borderline ADHD/Sensory)

Interestingly, these anecdotal references to children achieving better academically and personally conflict with the early research by Bruck (1985a/1985b) who found that a cohort of pupils with SEN who transferred from an immersion school to a monolingual school were not more advantaged.

5.10 Pupil Voice

Recognising the voice of pupils with SEN for the purpose of policy, plan, and intervention development has been increasingly promoted (United Nations, 2006; Porter, 2014). Within the case studies undertaken in this research, the pupils participating in the present study were asked to bring the researcher on a tour of their schools to discuss the different areas in their school and the activities they undertook. These interviews were conducted with nine of the pupils (N=11). One pupil with dyslexia was unable to undertake the tour as there was no adult from the school available to go on the tour with them. The ethical guidelines of the study state that tours/interviews could only be undertaken with pupils if there was an adult from the school present due to child protection issues. A pupil with SSLD was also unable to undertake the tour as they were too shy. This pupil spoke very little in school and was almost non-verbal. The tour with Pupil 4 was very short as the pupil decided to end the tour after only a few minutes. When this happened, the ethical guidelines of the study were adhered to and the tour was stopped immediately. The pupil then returned to their class. In this section an overview will be given of the opinions and attitudes of the pupils towards school in relation to the themes of: the classroom, the school hall, the school yard/outside area, the school kitchen/canteen, and sports and other activities.

5.10.1 The Classroom.

Five of the pupils talked about their classroom. All these pupils reported positive feelings towards their classroom except one. This pupil (Pupil 5) said that this was the area that they liked least, however, they did not elaborate further on the reason for this. The four pupils that liked their classroom spoke about how this was a place where they had friends and they did schoolwork. Here they felt included. These viewpoints reflect those of pupils with SEN in international and national research, where school engagement and enjoyment was defined by the relationships they had with their teacher and peers (Ring & Travers, 2005; Sellman, 2009; Squires et al., 2016; Travers et al., 2010). Two pupils (Pupil 3, 8) described how they used a laptop in class for their schoolwork. This was something that they enjoyed. The use of computer technology has also been referred to by pupils with SEN in other studies as a something that they enjoyed and made learning easier (Howard et al., 2019; NCCA, 2006, 2007a, 2007b; Travers et al., 2010). Only two of the pupils (Pupil 1 & 2) reported going to the special education teacher's classroom. Both pupils were in the same school and they enjoyed going to do schoolwork there. These pupils went to the special education teacher, both individually and in small groups. They reported receiving additional support in English and mathematics. Pupils in other studies also enjoyed accessing additional support through withdrawal practices due to its structure and how it was less intense for them (Norwich & Kelly, 2004; Squires et al., 2016).

5.10.2 The School Hall.

Seven of the nine pupils who took part in the interviews spoke about how they liked going to the school hall and how they felt included in activities that took place there. The two pupils who did not refer to the school hall did not have one in their school. The activities that they enjoyed in this area were games, physical education, and assembly. Similarly, in other studies of pupils with SEN also referred to how they liked activities such as these because they felt more

included or better able to participate (Howard et al., 2019; Riley, 2004; Travers et al., 2010). One of the pupils showed the researcher a room with windows that looked out onto the hall. This was an area that pupils could go to if they did not like the crowds gathered at assembly or the noise levels in the hall during this time (Howard et al., 2019). This was a positive method of inclusion and meant that all pupils could be comfortable whilst participating in day to day school activities.

5.10.3 The School Yard & Outside Area.

Almost all (n=8) of the pupils discussed how they enjoyed going out to the school yard to play or spending time in an outside area. In these areas they all said that they enjoyed playing with their friends. Two of the pupils said they liked the school yard because it was where they could run around. The games that pupils said they played in the yard were marshmallow, cops and robbers, and tag. As mentioned previously, other studies have shown that pupils with SEN have the ability to make friends and enjoy/engage in school due to these friendships (Gaona et al., 2018; Prunty et al., 2012; Travers et al., 2010). However, two of the pupils spoke about areas in the school yard that they did not like. Both pupils had ASD (Pupil 6; Pupil 8). One of these pupils (Pupil 6) did not like the area that the children line up in. They said that they did not like to line up and that sometimes the ground can be wet and cold. Due to this, accommodations were made by the school for this pupil to go straight into the school building and there was no need for them to line up. This minimised the stress this area caused for the pupil. The other pupil with ASD also did not like a place in their yard due to there being too many people there. Due to this, the school had made adaptations for this child to sometimes stay in at break time and do some work on the laptop or do jobs for the teacher.

5.10.4 School Kitchen & Canteen.

In two of the schools the pupils spoke about how they liked going to the school

kitchen or canteen. In the school in NI, the children got a hot lunch in the school canteen. Both pupils interviewed in that school (Pupil 8, 9) spoke about how they liked going there for their lunch. However, the pupil with ASD (Pupil 8) said that they were often uncomfortable in this area due to the small size of the area and the high volume of noise. In the school in the RoI, two pupils with ASD (Pupil 6/Pupil 7) talked about how they used the school kitchen for practical activities like making hot chocolate, cooking, and baking. For example, one of these pupils had been learning about Spain and they had used the kitchen to cook Spanish dishes. This was an activity that they enjoyed greatly.

5.10.5 Sport and Other Activities.

Pupils from all the schools spoke about how they had the opportunity to participate in team sports at school. This was something that they enjoyed and made them feel included. One pupil (Pupil 1) explained the positive feelings that they got from being part of the school team.

Taighdeoir: An bhfuil aon áit go mothaíonn tú bródúil?

Dalta: Ag imirt iománaíocht.

Researcher: Is there anywhere that you feel proud?

Pupil: Playing hurling.

One of the schools had a library and both pupils interviewed from this school enjoyed going to the library (Pupil 8/Pupil 9). One of these pupils (Pupil 9) had limited verbal abilities and was not able to elaborate further on the reasons for this. Whilst the other pupil spoke about how they liked reading non-fiction books in English in the library. Three of the pupils enjoyed doing art in school (Pupil 2, 8, 9). Whilst two other pupils (Pupil 6, 7) pointed out the nice artwork on display in the school that they liked. A pupil in one of the schools (Pupil 1) said that they had the opportunity to learn musical instruments in their school. They

were learning how to play the recorder and the clarinet. A school garden was in place in one of the schools and all the pupils from that school spoke about how they liked to go to the school garden and do some planting. They also liked this area because it was quiet and calm. This school also had a quiet room and again all pupils liked to go to this area. Two pupils (Pupil 3, 8) explained how they liked to go to the computer room in school. The activities that they undertook in this room included maths and literacy games and learning about PowerPoint. These findings are similar to other research who found that pupils with SEN particularly enjoyed activities such as sport, art, and computers (Howard et al., 2019; Prunty et al., 2012; Squires et al., 2016; Travers et al., 2010).

5.11 Conclusion

This chapter reviewed the findings of the present study in relation to the perceived benefits of educating pupils with SEN through Irish. The perceived benefits were bilingualism, acquiring Irish as a language, academic benefits for post-primary school, increased self-confidence/pride/self-esteem, and a positive school culture. Participants in schools spoke about the positive practices that were in place in their schools to meet the needs of all pupils, such as, parental support, inclusion strategies, pupil withdrawal for additional support, team teaching, support from educational professionals, ICT, and differentiation. Nevertheless, there were challenges experienced by pupils with ASD, dyslexia, and SSLD when learning through Irish. These challenges included academic challenges when accessing curriculum content and gaining proficiency in the Irish language. It was suggested that these pupils are often slower at acquiring Irish. Teachers and parents also experienced challenges when educating these children through a L2. The challenges listed by these groups were in relation to parental concern, parental involvement, and opinions of educational professionals regarding the suitability of IM education for pupils with SEN. The additional supports that were listed by schools, pupils, and families that would enable them to overcome these challenges were; the need for more Irish

language academic resources, learning support through Irish, more education and training for teachers, the availability of external services and assessment materials through Irish. Having reviewed the findings of the first stage of this research in Chapter 4 and the findings of stage two in the present chapter, the data is triangulated, and discussed in the next chapter.

6.1 Introduction

This chapter discusses and triangulates the main findings from stage one and two of the present study. In order to provide a context for the analysis of findings, the research questions and aims are reviewed. A brief summary is provided of the methodologies used to generate data. Following this, the data gathered is interpreted collectively using the following themes: prevalence rates, educational practices, the perceived benefits of IM education for pupils with SEN, and the challenges of educating pupils with SEN through Irish. Triangulation between data sets occurs where possible. A critique is provided of the findings and recommendations are made as to how they can be used to enhance policy and practice for SEN provision in IM schools, with reference to internationally recommended practices as reviewed in Chapter 2. It is important to note that many of the findings and recommendations from the present study, relate to the international data available on the additional supports required by pupils with SEN learning through a L2. Therefore, the findings and recommendations of the present study, may have implications for immersion/ bilingual education settings internationally and for pupils learning through a L2 in mainstream monolingual schools.

6.2 Aims of the present research

The aim of the present study was to investigate SEN provision and practices in IM schools in the RoI and NI. A mixed methods approach was used to critically examine the research question, what are the additional supports required by pupils with SEN in IM schools? Along with this, the following research sub-questions were also investigated:

- i. What are the current prevalence rates of pupils with SEN in IM schools?
- ii. How many pupils in these schools are receiving additional support from the special education teacher?
- iii. What methods are used to select pupils for this additional support?
- iv. What external support services are provided through the medium of Irish to these schools?
- v. How many pupils with SEN have transferred from IM schools over the past three academic school years (September 2014-September 2017)?
- vi. What are the educational practices in place in IM schools to meet the needs of pupils with SEN?
- vii. What are the perceived benefits of IM education for pupils with SEN?
- viii. What are the challenges of educating pupils with SEN through the medium of Irish?
- ix. What are the similarities and differences between SEN provision in IM education and immersion education internationally?

The findings of the survey (stage one), that was completed by a proportionate randomised stratified sample of IM schools (20%) in the RoI (N=29), informed the case studies undertaken in the second stage of the sequential explanatory mixed methods design employed. Schools in NI were not included in the first stage due to a low response rate. In stage two, case studies were conducted with pupils currently enrolled in IM schools with ASD (N=4), SSLD (N=3), and dyslexia (N=4). This approach involved interviews with pupils, parents, teachers, principals, and one SNA. It gave participants an opportunity to discuss their perspectives and experiences of IM education for children with SEN. Observations were conducted in the classrooms of pupils participating in the study to assess the practices in place to meet their

needs and the challenges faced when educating pupils with SEN through a L2. Interviews were also conducted with the parents of six children with SEN who transferred from several IM schools to English-medium schools due to their learning difficulties. It is important to note that the pupils in this cohort did not attend the schools participating in the case study research. Quantitative data gathered in the first stage was analysed using the statistical analysis package SPSS. A descriptive analysis of data was undertaken. All interviews undertaken in stage two, were transcribed and they were analysed using thematic analysis (Braun & Clarke, 2006). This method was also used for the analysis of open-ended responses in stage one. A benefit of this method was that it provided a rich and detailed data (Braun & Clarke, 2006).

6.3 Reflection on Literature

In Chapter 1, SEN policy, practice, and provision in primary schools in the RoI and NI were examined. Traditionally, a medical model of SEN provision was implemented for meeting the additional needs of children. The primary focus was on 'treating' or 'fixing' the impairments or difficulties that these children faced (Oliver, 1990, p. 7). Within this model of provision, children often failed to be included in mainstream education. Gradually this began to change with the introduction of the social model of provision, which focuses on removing barriers that restrict those with a SEN from living an equal and independent life. With the introduction of the Code of Practice (DENI, 1998) in NI and the EPSEN Act (2004) in the RoI, the focus of the Government in both jurisdictions became the inclusion and integration of pupils with SEN in mainstream schooling, so far as possible. This included pupils in IM schools. This form of education immerses pupils in the Irish language for up to 2 years before the formal introduction of the English curriculum (NCCA, 2015). All subjects are taught through the medium of Irish except for English. In the RoI, a continuum of support is in place in all primary schools for the assessment and support of pupils with learning difficulties. This continuum has three stages: (i) whole-school and

classroom support which includes preventative and proactive approaches, (ii) school support which responds to the needs of individuals and groups and, (iii) school support plus which provides individualised and specialist support (NCSE, 2011a). The primary practices in place to provide additional teaching support to pupils in all primary schools in the RoI are pupil withdrawal and in-class team teaching (Barrett, 2016, Travers et al., 2010). In NI, the Code of Practice (DENI, 1998) is utilised for the identification and assessment of pupils with SEN. There are five stages of provision within this code. The provision of SEN resources are overseen by the SENCO in each school, who may work in a full-time capacity or as a class teacher with additional duties (DENI, 1998). In some schools, the SENCO provides additional teaching support to pupils, whilst in others they cannot do this due to their classroom teaching duties. A peripatetic teacher works in all schools in NI, providing additional teaching support to pupils in English literacy.

Internationally, the academic outcomes of immersion education are positive for pupils and this form of education offers them the opportunity of additive bilingualism. As the present research involves children with SEN, the definition of bilingualism by Grosjean (1992, p. 51) which refers to "the regular use of two (or more) languages" by those who "need and use two or more languages in their everyday lives" was adopted. This definition was selected as it places an emphasis on the use of the languages, rather than the language proficiency of the children, who may never acquire full language proficiency in any language (Kay-Raining Bird et al., 2016). The benefits of bilingualism for children without SEN, such as, cognitive skills and higher levels of self-esteem, are interconnected with immersion education (Bialystok, 2009). It is also important to be mindful of the disadvantages of bilingualism which can occur for some individuals, such as, lower levels of verbal fluency and a smaller vocabulary in each language (Bialystok, 2009). Research has shown that pupils with SEN, in particular those with language difficulties, can acquire a L2 at no cost to their L1 (Kay-Raining Bird et al., 2016). Research has shown that pupils

with SEN do attend immersion schools. However, it is suggested that there are less pupils with SEN attending immersion schools than monolingual schools. This is thought to be due to the formation of the attitude that this form of education would be too challenging for these children and would place an added burden on them (Kremir-Sadlik, 2005; Yu, 2013, 2016). Nevertheless, limited dated research on the suitability of immersion education for all pupils has shown that pupils with learning difficulties can achieve comparably to their monolingual counterparts with the same category of SEN (see Genesee & Fortune, 2014 for overview). Studies suggest, that even though these pupils do well, there are challenges for them, their parents, teachers, and schools when they are learning through a L2. Internationally, challenges have been reported in the areas of parental involvement, the lack of bilingual or L2 resources, appropriate assessment, access to bilingual services, and teacher education (Lindholm-Leary, 2012). Previously, research has shown that in the RoI and NI, IM schools have reported the need for additional supports in the areas of: Irish language resources, Irish language assessment, and more access to external services through the medium of Irish (Barrett, 2016; COGG, 2010; Ní Chinnéide 2009, Nic Gabhann, 2008, NCCA, 2007).

As the second stage of the present study focused on pupils with ASD, dyslexia, and a SSLD in IM schools, the ability of children with these SEN to acquire bilingualism was reviewed in Chapter 2. International research suggests that children in all three of these categories have the ability to acquire a L2 with no negative impact on their L1 development (Bonifacci et al., 2017; Kay-Raining Bird et al., 2016). For the category of pupils with dyslexia, it has been found that there is a cross linguistic transfer of language skills. This means that the difficulties that they experience in literacy in their L1 are often experienced in their L2 (Bonifacci et al., 2017; Bonifacci & Tobia, 2016). For the category of children with a SSLD, sequential bilinguals were found to be slower than simultaneous bilinguals at acquiring their L2, and it took them longer to ‘catch up’ with their monolingual peers with the same condition (Cleave et al., 2010;

Rezzonico et al., 2015). Pupils in all three categories need consistent and high-quality exposure to the L2 in order to achieve higher levels of proficiency (Kay-Raining Bird et al., 2016). Pupil voice is incorporated in the present study, as pupils with ASD, dyslexia, and SSLD gave their perspective on their experience of IM education. Previous studies which included the voice of pupils with SEN found that these children mostly had a positive opinion of school (Norwich & Kelly, 2004; Riley, 2004). They enjoyed making friends with peers and having positive interactions with teachers, this made them feel more included (Travers et al., 2010).

6.4 Summary of Findings

6.4.1 Prevalence Rates.

A SEN prevalence rate of 9.4% (N=705) generated in the present study suggests an increase in the percentage of pupils with SEN attending IM schools over the last ten years (7.9%, N=12,829, Nic Gabhann, 2008). Even though this rate has increased in IM schools it is still lower than the rates quoted for all primary schools in the RoI (25%, Banks & McCoy, 2011; 27.8%, Cosgrove et al., 2014). This implies that there are less children with SEN attending IM schools than English-medium primary schools. The findings of stage one allowed for a comparison of SEN prevalence rates by category in IM schools over the last decade and all school types in the RoI (Barrett, 2016, Ní Chinnéide, 2009; Nic Gabhann, 2008). The findings show that over the last decade there has been a change in the most prevalent categories of SEN in IM schools. A positive correlation was found between the findings of the present study and of those by Barrett (2016) in relation to the eight most frequently reported sub-groups of SEN: dyslexia, ASD, dyspraxia, EBD, SSLD, ADD/ADHD, assessed syndromes, and mild GLD. This is further reinforced by the fact that no correlation was found between the results of the present study and those of Nic Gabhann (2008) undertaken a decade ago. For example, the most frequently reported subgroups a decade ago (2008) were: dyslexia, mild GLD, moderate GLD, SSLD, and dyspraxia.

The present study adds to previous research as the distribution of SEN by class groupings was analysed. It was found that there is a higher distribution of pupils with SEN in the senior classes (65.53%, n=462) compared to the junior classes, with only 12.05% (n=85) of cases of SEN being reported by first class. This shows that most formal identification and assessment of SEN happens in the senior classes. Several factors could be the reason of this, such as, limited access to assessment services, the delayed introduction of English reading, and the lack of appropriate assessment resources through the medium of Irish. This is a cause for concern as research has shown that early identification and intervention is the key to limiting and overcoming the challenges pupils with SEN encounter.

This study also analysed the breakdown of SEN in class groupings by category. The findings showed that there were more children entering junior infants with SSLD (27%) and ASD (23.07%) than any other category. EBD was the third most frequently reported sub-group in junior infants with 12%. There were no pupils reported with dyslexia or dyspraxia in this cohort. These findings suggest that like schools in the UK there are more children with ASD and SSLD in the junior classes. This may be due to the assessment of needs process in place by the Health Service Executive (HSE) and the work of public health nurses in relation to the early identification of difficulties. Understanding the needs of pupils entering schools is very important as it allows for teacher preparation, professional development, and the implementation of evidence-based practices. This is especially important for IM education, as the two most frequently reported SEN in junior infants incorporate language and communication difficulties and these pupils will be immersed in a L2. Dyslexia was found to be most prevalent in the senior classes. The number of pupils with a diagnosis increased steadily once the English curriculum started in schools, this happened generally from senior infants upwards. The delay in diagnosis is often due to the 'wait and see' period for L2 acquisition and the fact that educational psychologists do not assess children until they have had adequate exposure to English reading

(approximately two years). This can mean that pupils in IM schools are often diagnosed later than their English-medium counterparts. Due to the later diagnosis of pupils it is therefore important that schools have adequate early intervention programmes in place for the identification and provision of additional support to pupils experiencing difficulties when learning to read through Irish.

When the percentage of pupils with and without a formal diagnosis receiving additional teaching support was analysed it showed that a similar percentage of pupils in IM schools (16.5%, n=1,242) were receiving additional teaching support when compared to pupils in English-medium schools (17%, Banks & McCoy, 2011). The figure for IM schools in the present study is slightly higher than that of 13% generated a decade ago by Nic Gabhann (2008) for IM schools. However, this could be due to a change in the structure of allocating SEN resources overtime. Unlike previous research, this figure was analysed by gender. It was found that similar to international and national research, more boys (55.55%, n=690) than girls (44.45%, n=572) in IM schools were attending the special education teacher.

6.4.2 Practices in Place.

Through the analysis of survey, interview, and observation data it was found that IM schools implement strategies to meet the needs of pupils with SEN that are used in English-medium schools and recommended by the NCSE. In the first stage, the practices used daily in schools to provide additional support to pupils were: individual withdrawal, group withdrawal, in-class small groups, and co-teaching. The strategies and practices that were used by schools (N=29) when working with pupils who require additional support were IEPs (100%), student reflective journals (51.72%), project work (51.72%), use of DVD/video/TV/recordings (51.72%), ICT/Internet (58.62%), student self-assessment (58.62%), reflective learning (55.17%), problem-based learning (55.17%), and the use of cameras (51.72%).

In the second stage, the languages and subjects in which additional teaching supports were provided were investigated. It was found that not all of the schools that participated in the second stage were providing additional teaching support to pupils in Irish literacy. Of the schools that participated in the case studies (N=4) only two of them were providing additional teaching support to pupils in Irish literacy. The other schools were focusing on supporting pupils in mathematics and English literacy. One of these schools also stated that they were providing some of the mathematics support through English. Mathematics was cited within the findings as an area that was challenging for pupils with SEN, due to the difficult academic mathematical language used in Irish. This is an element that was also highlighted in previous research (NCCA, 2007). The reason given as to why schools were unable to provide support in Irish literacy was due to a lack of resources. The school in NI was unable to provide Irish language/literacy support due to not having a full-time SENCO within the school. The school in the RoI cited the need for more time to be allocated for the provision of support for Irish literacy. Support for pupils in the language of the school is important for the success of IM education as pupils learn all subjects except for English through Irish. International research has also shown that bilingual interventions provide better language attainment in children, the effects last for a longer period, and there is a benefit of the cross-linguistic transfer of skills (Ebert et al., 2014; Kohnert, 2010). Therefore, it is recommended that additional teaching support should be provided to pupils in both Irish and English literacy in IM schools. This need for additional support through Irish was also highlighted in previous research (NCCA, 2007; Nic Gabhann, 2008). Schools should be given guidance regarding how this additional teaching support can be implemented effectively and Irish language evidence-based practices should be developed for use in this area.

6.4.3 The Perceived Benefits of IM Education for Pupils with SEN.

To date limited research has been conducted on the benefits of immersion education for pupils with SEN. Much of this research is dated and shows

that bilingual children with SEN are at no more of a disadvantage than their monolingual peers in relation to language development (see Genesee & Fortune, 2014 for overview). The findings of the present study investigated the perceived benefits of bilingualism through immersion education for children with SEN. Parents, teachers, principals, and one SNA were asked what are the benefits, if any, of IM education for children with SEN? It is reported that the areas in which pupils with SEN experience benefits are: bilingualism, Irish language proficiency, academic advantages in post-primary school, increased self-esteem/self-confidence, and a positive school culture. Thus, from the findings of the present study, it can be suggested that pupils with SEN learning through a L2 can benefit from immersion education in the same ways as children without SEN. This is an important finding as the suitability of this form of education for pupils with SEN has been questioned, particularly by external educational professionals (Yu, 2013, 2016). This research adds to the empirical evidence available to parents, teachers, schools, and professionals regarding the suitability and perceived benefits of immersion education for all pupils. It will provide information to these groups on the context of IM education and how all pupils can benefit from learning through Irish as a L2.

6.4.4 The Challenges of Educating Pupils with SEN through Irish.

Many of the challenges faced by parents and IM schools when meeting the needs of pupils with SEN are similar to those reported internationally for bilingual children with SEN. The results of both stages of the present study show that there are challenges in the areas of: (i) appropriate assessment, (ii) teacher education, (iii) access to bilingual services, (iv) parental involvement and, (v) parental concern. The present study is the first known study to incorporate case study research on children with ASD, SSLLD, and dyslexia in IM schools. As mentioned previously, the benefit of this method is that it allows the researcher to gain an understanding of the perspectives of all stakeholders regarding SEN provision in IM schools.

6.4.5 Assessment through Irish.

In the IM schools studied in stage one, all schools (N=29) found the aspect of accessing assessment through Irish as challenging on some level (42.28% very challenging; 27.59% challenging; 24.14% somewhat challenging). Data from this stage also showed that some schools were using standardised mathematics assessments through English along with/or instead of maths assessments through Irish. Internationally, much debate has surrounded how to assess bilingual children appropriately. Monolingual assessments that only assess children through one of their languages have been found to be inappropriate (Hambly & Fombonne 2013, 2014), with bilingual assessments being cited as internationally good practice (O'Toole & Hickey, 2013; Restrepo et al., 2013). When this factor was further investigated in interviews in stage two, it was reported by participants that no formal standardised or diagnostic assessments are available through Irish except for the standardised Irish literacy and standardised mathematics tests. This causes difficulties for the schools and teachers as they were unable to assess children in the language of the school. Appropriate assessment therefore cannot take place in schools or elsewhere. This is an area which would benefit from future development, with the design of Irish standardised and diagnostic assessments to help evaluate the total competencies of children. Another area regarding assessment that was reported as a challenge in both the first and second stage was the availability of bilingual assessments by educational professionals, such as, educational psychologists and speech and language therapists. For example, in stage one, 28 of the schools (N=29) reported that accessing external professional services through Irish was challenging on some level. Bilingual services were reported as being rarely available. This is also the situation internationally (de Valenzuela et al., 2016). Due to this, most pupils attending educational professionals are assessed and receiving support through English only. There is a need for more assessments to be developed through the Irish language and for pupils from IM schools to be represented in the normative samples used for the scoring criteria of assessments. It is essential for resources to be allocated to this area to guard against the over or under-represented of pupils in IM schools with SEN.

6.4.6 Professional Development.

Challenges relating to classroom instruction arose in stage one that were not listed specifically in the second stage. Insufficient differentiation (79.31%, n=23), the lack of in-class support (68.96%, n=20), the inappropriate use of textbooks (72.41%, n=21), inappropriate instruction (58.62%, n=17), and inappropriate teacher expectations (58.62%, n=17) were listed as challenges by schools in relation to meeting the needs of pupils with SEN in the classroom. Internationally, special education teachers in immersion/bilingual education contexts have also reported, not knowing what to teach, being unable to meet student's individual needs (differentiation), and finding lesson planning a challenge (Casey et al., 2013). These challenges relate to teacher education and they provide a deeper understanding of the statements made in the qualitative interviews regarding the need for more teacher professional development. The need for additional teacher professional development was cited by 14 participants in the second stage of the research (N=34) and references were made for the need for courses with a focus on bilingual SEN provision.

This is an area where development is recommended as international research states that the absence of education, support, and guidance for special education teachers of bilingual pupils can lead to the formation of unrecognised biases (Pugach & Blaton, 2012), disproportionate referrals of pupils with SEN (Artiles et al., 2010), and misconceptions about L1 and L2 development (Paneque & Rodriguez, 2009). Furthermore, it has been found that pupils of teachers who are pedagogically competent achieve higher results academically. A conceptual framework for special education courses for immersion/bilingual education teachers has been developed which incorporates the following areas: (i) teacher proficiency in two languages, (ii) assessment, (iii) culture, (iv) planning and delivering instruction, and (v) professionalism (Rodriguez, 2005). The development of a course with a similar structure for special education and mainstream class teachers in IM schools would be beneficial as it would reduce the challenges experienced. This course would also be beneficial for teachers of L2 learners in monolingual schools.

6.4.7 Parental Concern.

Data from the survey stage stated that the primary reason why pupils with SEN transfer from IM schools (N=24), from September 2014 – September 2017, was parental anxiety or worry (70.83%, n=17). Findings from stage one, also show that pupil transfers occurred on the recommendation of the educational psychologist in 41.67% (n=10) of cases, the speech and language therapist in 16.67% (n=4), and the occupational therapist in 4.17% (n=1). However, in the second stage, the cohort of parents of pupils with SEN enrolled in an IM school (N=9) were happy overall with the provision of SEN within the schools. Nevertheless, they did comment on how they suffered from anxiety or concern regarding having chosen IM education for their child. This concern started for parents when their child was diagnosed by a professional and they were advised not to send them to an IM school by the educational psychologist, speech and language therapist, or the occupational therapist. Only two of the pupils participating in the study with ASD (N=4) had a language difficulty and their parents were advised against this form of education for them. The parents of the two pupils with ASD without a language difficulty were not advised against this form of education for their child. Studies conducted internationally on children with ASD also show that parents suffer from concern and are advised against raising their child bilingually due to it being perceived as an added burden for them. In both the present research and international studies, parents who went against the negative opinion of the professionals did so having conducted research into the topic themselves. Teachers and principals participating in the present study stated that a deficit of knowledge exists for educational professionals in relation to the suitability of bilingualism/immersion education for children with SEN. This concern/anxiety may be alleviated if there was empirical evidence and objective research data freely available to parents and professionals regarding the suitability of IM education and bilingualism for children with SEN. The dissemination of the findings of the present study will contribute to developing awareness and understanding of the suitability of IM education for pupils with SEN amongst parents and educational professionals.

This dissemination will involve presenting at conferences and the publication of articles in academic journals.

6.4.8 Parental Involvement.

In the second stage of the present study it was reported that parental involvement in IM schools is often challenging due to the fact that parents of pupils in these schools often lack proficiency in the Irish language. This factor has been found as challenging in previous research (Kavanagh, 2013). Further initiatives need to be implemented to develop parents' confidence in using Irish. Nevertheless, it is important to note that academic benefits have been found for pupils who undertake home language interventions with parents who do not speak the language of instruction of the school. This form of intervention involves parents reading to their children in the language they use at home. It also promotes vocabulary development in the child's first language through day-to-day activities and play (Ijalba, 2014). These interventions are of benefit to children due to the cross linguistic transfer of skills. The value of these programmes should be further investigated by IM schools due to the increasing diversity of pupils attending these schools and evidence-based practices should be created and implemented.

6.4.9 Academic Challenges faced by Pupils.

Data from stage one shows that nearly half of all the transfers of pupils with SEN from IM schools (45.83%, n=11) occurred due to the child having difficulty learning through Irish. This figure is similar to those of the earlier study by Barrett (2016) who reported that 40% of teacher respondents (N=64) stated that pupils with SEN have difficulty accessing the curriculum through Irish. Insights were provided into the challenges these pupils face in the second stage of the present study. Academic challenges when learning through Irish were reported for pupils with SEN by 16 participants (N=34), they referred to difficulties in mathematics and literacy. It was reported that pupils faced challenges in mathematics due to

the language used and their difficulties in reading and interpreting mathematical questions through Irish. Teachers and principals reported that more resources were required to enable pupils to access the curriculum effectively in this area. Previous research on IM education also found that more suitable resources (e.g. textbooks and mathematics resources) are needed for IM schools to help all pupils access the curriculum (COGG, 2010, NCCA, 2007). There are some resources available online for teaching pupils with SEN learning through Irish, however, these resources need to be publicised and promoted more. It is recommended that a list of all the resources available through Irish for pupils with SEN in both the RoI and NI is compiled and circulated. Internationally, bilingual schools also find it difficult to acquire L2 and bilingual resources.

6.4.10 The Irish Language as a Challenge.

All pupils involved in the case studies in stage two of the present study came from homes where English was their home language except for one pupil who was being raised through Irish. Therefore, these pupils were being immersed and educated in a new language in an IM school. It was also reported by almost two thirds of interview participants (n=23) that pupils within these categories of SEN (ASD, SSLD, and dyslexia) were slower to learn Irish than children without SEN. The participants of the present study stated that these pupils could acquire a L2 but they never alluded to whether they caught up linguistically with their peers. Nevertheless, they did state that their academic and language abilities had improved over time. Consistent exposure is needed for pupils with language and communication difficulties to acquire L2 proficiency. The pupils with ASD and language difficulties in IM schools were also reported to be slower at acquiring Irish. Two of the parents (N=4) of pupils enrolled in IM schools with ASD and one parent of pupils with ASD who transferred spoke about how their child refused to speak Irish even though they could understand it and they choose to reply appropriately in English. This was thought to be caused by oppositional characteristics associated with the diagnosis of ASD. For example, one of the pupils who transferred to an English-medium school began speaking Irish to the

class teacher (who had no Irish) even though they were exempt from Irish in the special class they attended. The pupils with ASD who did not have language difficulties, acquired Irish with ease and it had no negative impact on their L1 development. This finding is consistent with international research that found that bilingualism is attainable for children with ASD (Kay-Raining Bird et al., 2016). In the cohort of pupils with dyslexia, all the class teachers (N=4) and parents (N=3) interviewed stated that these pupils often get confused between Irish and English, the examples given included difficulties with spellings, grammar, and phonics. Similarly, the study by Barrett (2016) reported that almost half of teachers (46.9%, N=64) felt that pupils found verbal expression through Irish difficult and almost a third (32.8%) reported that pupils can become confused between Irish and English.

6.5 Appraising the Present Research

A sequential exploratory mixed methods approach was implemented in the present study. The quantitative survey and qualitative case studies allowed for the exploration of trends in a relatively large population. This was beneficial as it allowed for a better understanding of the phenomenon of SEN prevalence and provision in IM schools (Creswell, 2003). In stage one, a proportionate randomised stratified sample was used to guarantee that all school types were proportionally represented in the findings. The use of a questionnaire that is similar to ones used in previous research is a strength as it allows for a comparison of results over time.

Through undertaking case studies, multiple perspectives were gained on SEN provision in IM schools for pupils with ASD, SSLD, and dyslexia. Pupils participating in the case studies were selected from a variety of school types (DEIS school, single-stream school, double-stream school, and one school in NI). Schools from different areas of SES and patron bodies were included. The inclusion of a DEIS school was important as national and international research, states that children in areas of socio-economic disadvantage are

disproportionately represented with SEN. Furthermore, pupils participating in the study were selected from a range of class groupings. This allowed for a comparison of the practices and challenges in place across a variety of classes and school types. However, in one school, two of the pupils studied were in the same class (School B). Pupils with SEN were also given the opportunity to voice their perspective on IM education. Pupil voice is very important as it allows pupils to be active participants in research and give their perspectives on topics which affect them. These interviews were pupil led and based at the level of the pupil's ability. All pupils were informed of their right to withdraw at any stage and there was always an adult from the school present. Interviews were recorded and transcribed. Another strength of the present study is that parents were given an opportunity to put their perspectives forward. Parental voice is also important in educational research as it allows for their opinions to be compared to those of the teachers and principals participating in the study, rather than in isolation. This provided a comprehensive description of the evolving and complex nature of SEN provision through Irish as a L2. Observations were conducted in schools, which allowed for the investigation of school policies, practices, attitudes, and motivations. These observations were then triangulated with the data gathered through the survey and interviews. The triangulation of findings from both stages of the research allowed for a deeper understanding of the context and the research questions being investigated. Thus, allowing for the formation of meaningful recommendations in the areas of SEN policy, practices, and provision.

6.6 Limitations

It is important to recognise that the data gathered through stage one and two of this research only provides a 'snapshot' of SEN provision in IM schools at one moment in time (Robson & Cartan, 2016). For stage one, there are some methodological considerations which should be considered if this research was to be replicated again at a later stage. The questionnaire sent to schools should

be shortened to allow for schools to complete it more easily. The prevalence rate for SEN sub-groups would benefit from being analysed in terms of distribution by gender. The co-morbidity of SEN among pupils in IM schools would benefit from investigation. Replication of the survey research with the schools that participated in this research in the future would be beneficial as some of the schools were only newly established and did not have a full range of classes. A limitation of the survey research is that IM schools in NI were not included in the present study due to a low response rate. Therefore, this research fails to provide an overview of SEN prevalence throughout the entire island of Ireland. Also, a proportionate randomised stratified sample of IM schools in the RoI was chosen for the questionnaires rather than a total population sample. Obtaining completed samples from the total IM school population would provide a more comprehensive overview.

In the second stage, a small number of participants in each category of SEN (ASD, SSID, dyslexia) was studied. Even though this allowed for the in-depth evaluation of the additional supports required by these pupils and the challenges they faced, the sample size was limited. For example, only six parents of pupils with SEN who transferred from an IM school due to their learning difficulties were interviewed. Also, only nine of the eleven parents of pupils with SEN enrolled in IM schools were interviewed. Pupil interviews were not undertaken with all pupils participating in the study due to there being no adult from the school available to shadow this activity. Convenience sampling was used in the second stage and schools were selected based on their willingness to participate in the case study research and their location. One school in NI was included in the research and all the other schools were based in same county. The small number of schools and their geographical location is a limitation. A larger scale longitudinal research design that included schools throughout the four provinces of Ireland would have provided more robust findings. It was originally anticipated that pupils with mild GLD would be included in the case study research, however, this failed to occur due to there being insufficient numbers of pupils with this

category of SEN enrolled in the IM schools participating in the study. It was also originally anticipated that the experiences of the special educational needs organiser (SENO), educational psychologist, and Home School Liaison Officer of schools participating in stage two in relation to SEN provision in IM schools would be investigated. These professionals were invited to complete an online questionnaire but unfortunately there was a low response rate.

6.7 Contribution to Knowledge

The findings of the present study contribute to the limited international knowledge available regarding the suitability of immersion education for pupils with SEN. Findings of the present study may have implications for other forms of bilingual and immersion education outside of Ireland. For example, there are likely to be parallels between IM schools and immersion programmes in Scotland, Wales, Spain, Canada, and New Zealand to mention a few. There are also many findings and recommendations within the present study which are transferrable to educational contexts where pupils are learning through a L2 in monolingual schools. The contribution specifically relates to the benefits of IM education for pupils with SEN, the challenges of educating pupils with SEN through Irish as a L2, and the additional supports required by these pupils to enable them to access the curriculum. In the following section, the contribution of the present research to existing knowledge is investigated within the following themes: prevalence rates of SEN in IM schools, the perceived benefits of immersion education for pupils with SEN, the challenges of educating pupils with SEN through a L2, the challenges of learning through a L2 for pupils with SEN, and the additional supports required by these pupils.

The findings of this study in relation to the prevalence rates of SEN in IM schools contributes to the limited data gathered previously in this area (Barrett, 2016; Ní Chinnéide, 2009; Nic Gabhann, 2008). Findings are significant as they reinforce those of the study by Barrett (2016) that suggest that there has been a change in the needs of pupils in IM schools since the study by Nic Gabhann (2008).

Furthermore, the findings of the present study contribute new data to this area with the prevalence rates being analysed by class and categories of SEN being made available. No known study has been conducted previously which provides this breakdown of SEN in IM schools. The present study also provides information on the percentage of pupils in IM schools receiving additional teaching support from the special education teacher and the gender breakdown of this cohort.

The perceived benefits of bilingualism and immersion education for children without SEN has been widely researched. However, there has been limited research undertaken on these benefits for children with SEN. Therefore, this study contributes to the existing, limited, and dated data available. Findings from the present study suggest that although there are challenges in terms of bilingualism/immersion education for children with SEN, pupils can access many of the same benefits as pupils without SEN. These findings are significant as there has been much debate around the suitability of bilingualism and immersion education for children with SEN, with many educational professionals advising against bilingualism and learning through a L2 for these children. Furthermore, the incorporation of pupil voice in the research design is significant as a paucity exists in relation to research on the perspectives and experiences of pupils with SEN in IM schools and immersion schools internationally.

The findings of the present study on the challenges of IM education for pupils with SEN contribute to the limited research undertaken on the suitability of Irish immersion education for pupils with SEN. Through the comparison of findings with previous research it is clear, that there have been advances in the areas of resources, assessment, the language of intervention, teacher education, and access to bilingual services for IM schools over the last decade. However, there is still further development required in these areas. Also, findings are significant as they indicate that the challenges faced by IM schools are encountered by other forms of immersion and bilingual education internationally. This in turn suggests that immersion education contexts worldwide may benefit from the sharing of knowledge and resources.

Research has been conducted on the ability of children with ASD, dyslexia, and SS LD to acquire a L2 in an international context. The findings of the present study contribute to these results, as they reinforces that pupils with SEN (ASD, dyslexia, SS LD) have the ability to acquire a L2 and that there is often a cross-linguistic transfer of skills. For the cohort of pupils with ASD (with language impairments) and SS LD, the findings of the present study reinforce those of international studies which suggest that pupils with these categories of SEN can often be slower at acquiring a L2. Furthermore, their L2 abilities will reflect their L1 abilities. The present research is significant as no known study has been conducted in IM education on this topic.

As mentioned previously, the challenges stated by schools in the present study are similar to those experienced in IM education over a decade ago. The present study contributes to knowledge through offering up-to-date recommendations. The implementation of these recommendations will positively impact on SEN policy and practice development in IM schools.

6.8 Recommendations for Policy & Practice

Having evaluated and assessed the challenges faced by pupils, parents, and teachers in relation to SEN provision in IM schools, recommendations are made in this section based on the findings of the present study and the literature reviewed in Chapter 2. This section will address the research question: what additional supports are required by pupils with SEN in IM schools. It is important to note that due to the similarities between IM education and immersion schools internationally, these recommendations may be transferable to other immersion education contexts throughout the world and also to monolingual schools where pupils are learning through a L2.

6.8.1 Professional Development.

It is clear that schools and teachers experience challenges when educating pupils with SEN through Irish. For example, areas such as differentiation, classroom

instruction, assessment, and unrealistic teacher expectations have been cited as challenging by participants in the present study. Participants have also referred to the need for more professional development to be made available for teachers. Similarly, international research suggests that further teacher education is needed for special education immersion education teachers in the areas of: (i) bilingualism, (ii) the transfer of skills across languages, (iii) exposure to second languages and, (iv) teaching strategies (Rodriguez, 2005). The design and implementation of a special education teacher professional development programme for IM teacher, immersion/bilingual teachers internationally, and those teaching pupils through a L2 in a monolingual school, is an urgent requirement, as it would lead to a reduction in unrecognised biases (Pugach & Blaton, 2012), disproportionate referrals of L2 learners with SEN (Artiles et al., 2010) and, reduce misconceptions on L1 and L2 development (Paneque & Rodriguez, 2009). Furthermore, competent special education teachers promote higher academic achievement for all pupils (Feng & Sass, 2010). It is imperative that teachers in IM schools are educated further on the benefits of implementing universal design for learning in the classroom. The implementation of this framework would mean that the curriculum is accessible for all pupils learning through a L2 (Mady, 2018). This framework has also been shown to improve pupil motivation, which in turn can impact positively on language acquisition and development which is a central part of immersion education. It is suggested that teacher education in this area should be promoted and undertaken within the ITE programmes, Cosán, and the Droichead framework which were reviewed previously in Chapter 2.

6.8.2 Assessment.

Statistics show that most of the pupils with SEN in IM schools are enrolled in the senior classes. This may be due to schools giving pupils time to acquire Irish as a L2, a lack of early literacy screening assessments in Irish, and the 'waiting period' needed for pupils to have acquired enough English literacy exposure for them to undertake an English language educational psychological

standardised assessment (O'Toole & Hickey, 2013). It is therefore recommended that standardised and diagnostic Irish language/bilingual assessment methods are developed and implemented through Irish, to enable the early identification of literacy difficulties in Irish and mathematics. Screening tests in English are also appropriate for use in IM schools, nevertheless further guidance and support on the implementation/use of these tests is recommended to make sure that effective assessment is being carried out (Lugo-Neris et al., 2015). Bilingual assessment has been recognised as good practice internationally as it allows for the complete assessment of a child's development (De Lamo White & Jin, 2011; Ebert & Kohnert, 2016; Gutiérrez-Clellen & Simon Cereijido, 2010). Additional teacher professional development is required in the use and importance of informal bilingual assessment methods, such as, dynamic assessment (Ebert & Kohnert, 2016; Kapatzoglou et al., 2012; Martin, 2015; Pena et al., 2014; Pena et al, 2001), language sampling/narrative sampling (Blom & Paradis, 2013), and parental reports (Paradis et al., 2013). Irish language criterion based assessments should be developed to better enable teachers to identify pupils for additional teaching support, early intervention, and assessment. Irish language assessment profiles for Gaeltacht and IM schools have been previously developed (Ó Siaghail & Déiseach, 2004). These should be updated and made available to all schools for the assessment of pupils. Also, the screening and diagnostic assessment, the Drumcondra Tests of Early Literacy (Educational Research Centre, 2019a) should include an Irish language test. The Drumcondra Test of Early Numeracy should be available through Irish for IM schools to assess pupils' total mathematical abilities (ERC, 2019b). It is also important that teachers are educated in the importance undertaking appropriate informal assessment on pupils in both of their languages and the appropriate methods for doing this. For example, as listed in Chapter 2, there are many informal assessment strategies, such as, narrative samples, and samples of writing which can be undertaken in all languages, which will provide an overview of their total language abilities of pupils. Also, teachers should be educated in the use of dynamic assessment and its valuable input in terms of identify pupils with language and learning difficulties.

6.8.3 Bilingual Professional Services.

Professional development courses should be developed and provided to educational professionals in relation to SEN and bilingualism. Speech and language therapists, visiting teachers, and educational psychologists require additional professional development to further their understanding of IM education for pupils with SEN, L2 acquisition, bilingualism, and also they need to develop their Irish language proficiency (de Valenzuela et al., 2016; Ní Chinnéide, 2009; O'Toole & Hickey, 2013; Yu, 2013). As was evident in previous research studies, little assessment is provided by these professionals through Irish (O'Toole & Hickey, 2013). Educational professionals should be made aware that the process of them translating standardised assessments from English to Irish does not provide valid and reliable results. Also, standardised assessments through Irish should be developed for these professionals, to allow them to assess the total abilities of pupils in IM schools. The implementation of these recommendations would better inform their assessment, SEN provision, and decision-making regarding recommendations around the suitability of IM education for pupils with SEN.

6.8.4 Curriculum Resources.

The Irish language used in textbooks (particularly mathematics) and standardised assessments have been reported by participants in the present study and previous research as being too difficult for children to access as it fails to accurately represent the day to day language used in schools (Ní Chinnéide, 2009; NCCA, 2007). The level of difficulty of the Irish language used in these resources should be reviewed in order to make them more accessible to all students and so that they accurately reflect the daily language used in schools (see Ó Murchadha & Flynn, 2018 for further information). Further progress should be made on the development of an official bank of shared resources by teachers for pupils with SEN, this would enable greater access to teaching materials and improve the teaching strategies used in classrooms. There are some resources

available online on websites such as COGG, Twinkl, Council for the Curriculum, Examinations and Assessment, and unofficial resource sharing Facebook pages (e.g. Múinteoirí Gaeilge ag roinnt acmhainní cabhrach agus smaointe/ Irish teachers sharing helpful resources and ideas). However, these sites need greater publicity amongst teachers, as some teachers may be unaware of their availability. The development of an official website where published resources and teacher made resources from both the RoI and NI is needed. This is important as internationally, a lack of appropriate curriculum resources, such as, appropriate textbooks and assessment materials have made bilingualism impractical and unattainable for many children with SEN (Hampton et al., 2017; Jegathesan, 2011; Kay-Raining Bird et al., 2012; Kremir-Sadlik, 2004; Wharton et al, 2000; Yu, 2013). Findings also show that there is a need for the creation of more ICT recourses through the medium of Irish for pupils with SEN, particularly those with ASD, to enable them to overcome the dilemmas of inclusion. More apps are needed through the medium of Irish which enable pupils to: (i) engage with the Irish language, (ii) further develop their comprehension skills, (iii) hear Irish being used outside of the classroom, (iv) undertake dyslexia interventions through Irish (e.g. Nesity) which develop pupil's confidence and spelling/phonics through games, and (v) learn and develop mathematical skills through Irish.

6.8.5 Parental Concern.

Parents should be made aware of the empirical data available relating to benefits and challenges of immersion education for children with SEN. This data should be easily accessible for all. It was reported that parental anxiety often generated from the viewpoints of external professionals on the unsuitability of IM education for pupils with SEN. It is recommended that educational professionals also have access to this data, to help them to relay accurate information regarding the suitability of bilingualism for children with SEN to parents (Hampton et al., 2017; Jegathesan, 2011; Kay-Raining Bird et al., 2012; Yu, 2013). Various media, such as, online courses, seminars, and workshops could be used to disseminate this knowledge. A parent support service run by trained professionals with a

knowledge and understanding of SEN in IM schools (by email or phone) should be developed to support parents. A website based on empirical research on SEN provision for children learning through a L2 and offering support and guidance for all school stakeholders should be developed. A pamphlet offering an overview of the same information would also be useful for circulation to parents in schools.

6.8.6 Parental Involvement.

Parental involvement has been reported as challenging due to parents' lack of Irish language proficiency. It is therefore recommended to provide further opportunities for parents to become involved in IM schools using initiatives, such as, Irish language classes, online courses, phrase books, an 'English Zone' for parents in the yard, homework helper networks, and home language literacy interventions (Kavanagh, 2013). Furthermore, research has shown that there are benefits for pupils with SEN when home language interventions are undertaken by parents, this is an area which should be further explored in IM schools. Suitable interventions include; parent child reading initiatives in the home language and parent implemented language – literacy interventions with a focus on developing vocabulary in the home language through day-to-day activities and play (Ijalba, 2014). As there has been an increase in the diversity of the home languages of pupils' in IM schools the implementation of such programmes is a must. This is important as international research shows that parental involvement leads to higher levels of academic achievement for pupils (Fan & Chen, 2001, Hill & Taylor, 2004; Wang & Sheikh-Khalil, 2014; Wong, et al., 2018).

6.8.7 The Language of Interventions.

Provision should be made in schools for providing additional teaching support to pupils through Irish and for Irish literacy as suggested in previous research (Ní Chinnéide, 2009; Ní Chlochasaigh, Shiel, Ó Duibhir, 2019; Nic Gabhann, 2008).

Bilingual interventions have been found to be most effective for pupil progress (Ebert et al., 2014). Internationally recommended practice states that bilingual language interventions are most suitable for pupils with more than one language (IASLT, 2016). Schools participating in the present study commented on the fact that they were unable to undertake Irish language interventions due to time constraints. It is recommended that further consideration should be given to the bilingual context of IM schools by the Department of Education when allocating additional teaching supports, IM schools should be given more teaching time to work with pupils in both Irish and English.

6.8.8 Implications of Research for Early Childhood Care & Education.

The findings of the present study also have implications for the early childhood care and education sector, in particular in relation to the transition of pupils from IM preschools (naíonraí) to primary schools. The findings and recommendations of the present study should be used to inform the Access and Inclusion Model (AIM, 2019) used in preschools to promote inclusion and high quality education for all pupils. There are seven tiers within this model: (i) an inclusive culture, (ii) information for parents and providers, (iii) qualified and confident workforce, (iv) expert early years' educational advice and support, (v) equipment, appliances, and minor alterations grants, (vi) therapeutic instruction, (vii) additional assistance in the preschool room (AIM, 2019). The findings and recommendations of the present study could help promote an inclusive culture in naíonraí and in preschools where children are learning through a L2. The information gathered could be presented to parents and providers in different manners, such as, through online forums/courses, workshops, or pamphlets. The information included in this dissemination should include an outline of the concept and stages of L1 and L2 acquisition. It would be beneficial for teachers in this sector, to receive education in the areas outlined above in the section on professional development. Particularly in relation to bilingualism/language development, appropriate assessment methods, and the using parental involvement for language development. This education could be provided as

part of the Leadership for Inclusion in the Early Years Programme (LINC, 2019). Education in the above areas, is recommended for both teachers in a naíonra setting and all preschool settings, as there has been an increase in the number of children being educated through a language other than their mother tongue. For example, in Ireland more children are now starting school with a language other than Irish or English as their home language. Also it would better equip parents and teachers when facilitating transitions from preschool to primary school and assessing school readiness in preschool children.

6.9 Recommendations for the Future Research

The findings of the present research have highlighted previous unknown issues that merit further research. Future research would be beneficial into the SEN prevalence by gender in IM schools. Larger studies on the additional supports required by pupils with ASD, SSLD, and dyslexia learning through Irish that incorporate a wider range of geographical locations would also provide further information on this topic. The benefits of bilingualism and immersion education for pupils with a wider variety of SEN merits investigation. A comparison should be undertaken on the academic attainments of pupils with SEN in IM schools and those with the same category of SEN in English-medium schools. An investigation into the challenges faced by pupils with other categories of SEN would be beneficial. Finally, further research is merited into the creation of additional supports to address the recommendations of the present study.

6.10 Conclusion

The suitability of immersion education for pupils with SEN has been questioned in some quarters. Data gathered from the survey in stage one of this research on the prevalence of pupils with SEN in IM schools throughout the RoI, shows that pupils with SEN do attend IM schools. Furthermore, it is suggested that the number of pupils with SEN in IM schools has increased over the last decade. The increase in the prevalence of pupils with SEN in IM schools may be due

to the establishment of more schools over time or a change of diagnostic assessments and diagnosis criteria. Unfortunately, there are no known studies available on SEN prevalence in immersion contexts only which would allow for international comparisons within this form of education. Findings indicate that when this figure is compared to findings for English-medium schools (nationally and internationally), the number of pupils with a diagnosis of SEN in IM schools is lower. Nevertheless, it can be suggested that there are similar percentages of pupils in IM schools and English-medium schools receiving additional teaching support in schools. This is encouraging as it suggests that those attending an IM school are not at greater risk of experiencing a learning difficulty and requiring additional teaching support.

Through the triangulation of data and its comparison with international research it is evident that there are many similarities between the Irish immersion context and immersion education contexts worldwide. Significantly, the findings of the present study show that pupils with SEN in IM education can access the same benefits of bilingualism/immersion education as referred to in research undertaken internationally. The present research also shows that, similarities exist between IM and bilingual education worldwide, in relation to the challenges that pupils, parents, and teachers face when children with SEN are learning through a L2. The challenges of educating pupils with SEN through a L2 include: academic challenges, language acquisition, parental involvement/concern, the opinions of educational professionals on the suitability of bilingualism/immersion education for pupils with SEN, L2 resources/assessments, teacher education, and access to bilingual services.

The findings of the present study contribute to the limited knowledge available in this research topic, particularly in relation to the perceived benefits of immersion education for pupils with SEN. Nevertheless, there are limitations to the findings of the present study, such as, a small sample size in the second stage. Through conducting this research and examining the findings, areas of further research have been identified, such as an investigation into

the prevalence rates of SEN in IM schools by gender, the challenges faced by other categories of SEN when learning through Irish, and the development of practices/programmes to overcome the challenges identified. It is hoped that the findings of the present study, will positively inform policy and practice in IM schools in relation to SEN provision and that pupils, parents, teachers, and schools will benefit from the present study.

**The
Additional Supports Required
by Pupils with Special Educational
Needs in Irish Medium
Schools**



Dr Sinéad Andrews

2019

An Chomhairle um Oideachas
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