

**Effective Provisions of Educational Services for  
Native Arabic Learners with dyslexia  
at a Private School in Northern Emirates in the UAE  
A case-study**

الخدمات التعليمية والدعم الفعال لمتحدثي اللغة العربية ذوي عسر القراءة في  
مدرسة خاصة في الإمارات الشمالية في دولة الإمارات العربية المتحدة

by

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of the requirements for the degree of  
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## **Abstract**

This study investigates the effectiveness of educational services provisions offered by an international bilingual private school in the Northern Emirates of the United Arab Emirates (UAE), for two Arabic students speaking English as an Additional Language (EAL) diagnosed with dyslexia. Using a qualitative, single case study approach, data were collected from observations, field notes, semi-structured interviews, and document analysis. The students were observed in inclusive general classrooms in Year 6, in English and Arabic, respectively, in addition to pull-out sessions for further English literacy support.

Findings revealed that the school is providing both students with effective educational services, but the students are not able to access the Year 6 curriculum in English. There are no support services provided for Arabic literacy. A lack of coordination between teaching staff, administration and parents, and an unclear vision of inclusive education, had a negative impact.

Recommendations include expanded inclusion and its development within the school environment; increased cooperation between all stakeholders with further support from the government; and within the school, an official policy of inclusion, flexible curricula, and teacher training in inclusion.

Limitations of the study were partly due to access. Public schools were inaccessible due to government regulations; most private schools declined to allow access; and the school under study declined to provide official documents or policy statements. The observed students were limited in number (two), gender (both male), and grade level (both in Year 6). Future research could include more students from both genders and at different grade levels, in more schools in different areas of the UAE and the greater Gulf Cooperation Council (GCC). Of particular interest would be to

investigate the effect of having bilingual 1:1 support assistant to maximize student literacy in both English and Arabic.

*Keywords: Educational services provision, Bilingual students with dyslexia, Inclusion*

## المخلص

### **الخدمات التعليمية والدعم الفعال لمتحدثي اللغة العربية ذوي عسر القراءة في مدرسة خاصة في الإمارات الشمالية في دولة الإمارات العربية المتحدة**

تبحث هذه الدراسة مدى تأثير الخدمات التعليمية المقدمة لدعم طالبين لغتهم الأم هي العربية لديهم عسر القراءة في مدرسة دولية خاصة ثنائية اللغة في إحدى الإمارات الشمالية في دولة الإمارات العربية المتحدة. لقد اتبعت هذه الدراسة المنهج النوعي وذلك باستخدام منهج دراسة الحالة لمدرسة واحدة من خلال تجميع البيانات عبر الملاحظات الميدانية المدونة والمقابلات الشبه منظمة وتحليل الوثائق الصادرة من وزارة التربية والتعليم في صدد التعليم الدامج لمن لديهم عسر القراءة. تمت دراسة وتحليل فاعلية الخدمات المقدمة في هذه المدرسة من خلال طالبين في الصف السادس مدمجين أثناء فصول اللغة العربية واللغة الإنجليزية الدامجة بالإضافة إلى حصص التقوية الخاصة لدعم منهج اللغة الإنجليزية. وقد استغرقت عملية البحث وتجميع البيانات الفصل الدراسي الأول. إنّ نتائج هذه الدراسة أظهرت مجموعة من النتائج الإيجابية التي أحرزها الطالبين بفضل الخدمات التعليمية الخاصة الملائمة لاحتياجاتهما المقدمة من المدرسة، إلا أنّ ذلك التقدم يبدو أنه لم يؤهل الطالبين لدراسة منهج الصف السادس الانتقالي فيما يخص مادة اللغة الإنجليزية. وأمّا بالنسبة لمادة اللغة العربية التي تعتبر لغة ثانوية في نظام المدرسة لم يتم رصد خدمات خاصة تعليمية خاصة لدعم عسر القراءة لدى الطالبين. وقد يوصي هذا البحث من أجل تقديم خدمات تعليمية فعّالة إلى الحاجة الماسة لمتابعة ومعالجة عملية التنسيق بين كل أصحاب المصلحة سواء من الهيئات الإدارية والتدريسية وأولياء الأمور التي تستدعي وضع رؤية شاملة للتعليم الدامج ضمن معايير وخطة شاملة تضمن التعاون والتنسيق بين أفرع المدرسة الثلاثة. كذلك توصي الدراسة إلى أهمية الدّعم الخارجي للمدرسة من قبل المجتمع والوزارات المعنية في الدولة بالإضافة للدّعم الداخلي من المدرسة من خلال اعتماد آلية التعليم الدامج الذي يوفر منهاج مرّن يتناسب مع قدرات الطلاب المدمجين وكذلك هيئة تدريسية مدربة ومهيئة لدعم الفصول الدّامجة. الصعوبات التي واجهت إجراء هذه الدراسة تمثلت بعدم الحصول على موافقة من الجهات الحكومية لإجراء البحث في مدارس حكومية، كذلك تم الرفض من قبل معظم المدارس الخاصة المتواجدة في تلك الإمارة. ما ترتب عليه محدودية جنس وعدد الطلاب المشاركون. بالإضافة إلى صعوبة الوصول للوثائق والمعلومات الخاصة بالمدرسة المستهدفة. هناك توصيات عامة في المستقبل لإجراء البحث على أكثر من حالة (مدرسة) وعدد أكثر من الطلاب في دولة الإمارات العربية المتحدة والدول المجاورة في نفس الإقليم في منطقة الخليج العربي. وبشكل خاص يود الباحث لو يجري الدراسة على حالات متعددة بنفس المعايير ولكن بمتغير وهو تقديم خدمة تعليمية جديدة وهي أن يكون المعلم الخاص يتقن كلا من اللغتين الإنجليزية والعربية ليتم البحث عن تأثير ذلك على الطلاب العرب الذين لديهم عسر القراءة في كل من مادتي اللغة العربية والانجليزية.

## **DEDICATION**

This achievement is dedicated to my loving family. Above all my husband, who didn't hesitate to support me to achieve my dream, who have laid the base for my educational development through his unconditional love, concern, ethical and financial support.

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## Abbreviations

ALN	Additional Learning Needs
AT(1)	Arabic Teacher 1
AT(2)	Arabic Teacher 2
CPD	Continuing Professional Development
CRPD	Convention on the Rights of Persons with Disabilities
EAL	English as an Additional Language
ESL	English as a Second Language
ET(1)	English Teacher 1
ET(2)	English Teacher 2
GAT	General Aptitude Test
IDEA	Individuals with Disabilities Education Act
IEP	Individualized Educational Program
IQ	Intelligence Quotient
KG	Kindergarten
L1	First Language
L2	Second Language
LCDH	Linguistic Coding Differences Hypothesis
LSA	Learning Support Assistant
MOE	Ministry of Education
MOH	Ministry of Health
MSA	Ministry of Social Affairs
PE	Physical Education
RTI	Response to Intervention
S(1)	Student 1
S(2)	Student 2
SENCO	Special Educational Needs Coordinator
SEND	Special Education Needs and Disability
SLA	Second Language Acquisition
1:1 SLA	One to One Support Learning Assistant
SMART	Specific, Measured, Achievable, Realistic and Timely
SpLD	Specific Learning Disability
TA	Teaching Assistant
UAE	United Arab Emirates
UK	United Kingdom
UNESCO	United Nations Educational, Scientific and Cultural Organization
US	United States
VAKT	Visual, Auditory, Kinesthetic and Tactile

## **Chapter 1 Introduction**

Great efforts are being made to teach children with special educational needs (SEND) among their general education peers within mainstream classrooms. Inclusive education has become a global agenda that impacts societies extensively, promotes social justice, facilitates the formation of a welcoming society, and prevents discrimination (UNESCO 1994). Successful inclusion is defined as a means to ensure that students can participate successfully in a mainstream educational setting, regardless of their abilities or disabilities, by adapting the regular school curriculum, using appropriate teaching methods, having good classroom organization and assuring access to resources (Alborno & Gaad 2014).

The foundation for inclusive education in the United Arab Emirates (UAE) was established following the issuance of Federal Law no. 29/2006 on the Rights of People with Special Needs (UAE Government 2019). In 2010 the Ministry of Education (MOE) in the UAE issued the document “School for All” as a guide for education stakeholders, including administrators and educators in regular schools. The SEND category reported in the ‘School for All’ theme is referred to as ‘Specific Learning Disability’ (SpLD).

SpLD refers to a heterogeneous group of neurobehavioral disorders demonstrated over serious unexpected, specific and persistent difficulties in the acquisition and use of efficient reading, writing, or mathematical abilities despite conventional instruction, intact senses, normal intelligence, proper motivation and adequate socio-cultural opportunity (Shapiro BK & Gallico 1993).

This study investigates the effectiveness of educational services provided to support students with dyslexia who are also English as an Additional Language (EAL) learners.

## **1.1 Background**

SpLD is an overarching term for several associated learning difficulties which may manifest across all ability ranges and with variable severity or significance, referring to a difference or difficulty individuals have with particular aspects of learning. The most common SpLD is dyslexia (difficulties in reading efficiently). Dyslexia challenges include slower reading with multiple mistakes, line-skipping and repeatedly misspelling words.

Children who struggle with any of the range of language processing issues when learning a first language will, inevitably, have similar struggles when attempting to acquire a second language (Elshazly 2019; Nijakowska 2010); some researchers believe that fluency in a second language is virtually unachievable by such students (Dinklage 1971). Sparks and Ganschow (1991) developed the Linguistic Coding Differences Hypothesis (LCDH) to explain this phenomenon.

The basic educational services provisions to support SEND students are made to allow the student to remain included within a mainstream school and to be able to continue on par with his or her peers. At the secondary level, provisions include providing various accommodations over the remediation efforts made in the primary years. Such accommodations could include allowing extra time when taking tests, while modification could involve incorporating a substitution subject within the class schedule, or making allowances for repetitive mistakes, such as in spelling (Karande & Kulkarni 2005).

## **1.2 Statement of the Problem**

Developing educational services offered to students with special needs within the regular classroom in mainstream schools has consistently been the goal of the UAE



government, which is committed to following international educational standards in reforming education (Dukmak 2013).

The UAE MOE recognizes specific learning disabilities in referring to dyslexia as one of the conditions which requires an effective provision to accelerate the pace of students' learning (UAE Ministry of Education 2010). In addition, it seeks to reduce the achievement gap between SEND pupils and their typically developing peers (Rose 2009).

There is not enough information about effective educational services for learners with dyslexia in a bilingual context. Additionally, a sizeable gap was observed in inclusion in general, and in particular dyslexia, in a bilingual private school in the UAE among western and Arabic staff.

### **1.3 Purpose of the Study**

The key aim of conducting this investigation is to indicate ways of improving inclusive education for native Arabic students with dyslexia, which is considered the most common hidden disability within classrooms. This study is an analysis of the impact of provisions, or lack thereof, on the academic success of students with dyslexia within an inclusive educational setting.

The targeted participants are two Emirati native speakers of Arabic at an international bilingual private primary school in the Northern Emirates who speak English as an Additional Language (EAL). The school has a focus on English literacy and constructivist curricula are followed. Through qualitative data analysis, the study examines the effectiveness of the students' IEPs and school stakeholders including Special Educational Needs Coordinators (SENCOs), Additional Learning Needs Teaching Assistants (ALN TAs), 1:1 Support Assistants and classroom teachers.

The provision of educational services is crucial, however, so far only limited studies have been conducted to evaluate the effectiveness of the provision of educational services in private schools in the UAE. Accordingly, the aim of this research is to (a) explore the educational services provided for native Arabic, SEND learners in language subjects taught by using both their first language (Arabic) and second language (English) in a private secondary school in the UAE; and (b) provide recommendations based on the findings, in order to enhance educational provisions for SEND students with dyslexia who are EAL learners.

#### **1.4 Research Questions**

The main questions of this study are:

- To what extent are educational provisions effective for learners with dyslexia in subjects taught using English as a dominant language and Arabic as a foreign language in a secondary Northern Emirate private school?
- What could be recommended to support the services offered for learners with Dyslexia in such a school?

#### **1.5 Significance of the Study**

This study highlights the alarming potential for significant damage caused by the lack of sufficient services and provisions for students with dyslexia, through analyzing provision effectiveness. Dyslexia International (2014) reported that there is a considerable number of undiagnosed students with dyslexia, with a dramatic story of poor awareness about this common learning difficulty. Literacy skills are vital and should be addressed in each classroom holistically, to prevent those children from failing and avert other psychological issues such as frustration and poor self-image (Murphy 2004). A knowledgeable and prepared teacher is an effective factor to cope with this common issue, as research shows (Dyslexia International 2014) that 90% of

children with dyslexia are able to be educated within an inclusive classroom setting when trained teachers are part of the intervention.

This study will expand the research investigating the inclusion of SEND with dyslexia within a private setting, which is currently limited in the UAE.

## **1.6 Operational Definitions**

*Specific Learning Disabilities (SpLD)*, according to the Individuals with Disabilities Education Act (IDEA), is “a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, that may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations” (IDEA 2018). Furthermore, “the term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia” (IDEA 2018).

*Dyslexia* is a neurological issue that encompasses an extensive variety of reading disabilities (Reid 2012); however, it is still not completely comprehended. Most students with dyslexia are perceived as having trouble grasping the shapes of letters and afterward relating those shapes to the sounds that the letters symbolize. Students with dyslexia frequently invert the order of the letters in a word or even forget them totally. Different impacts of dyslexia incorporate troubles in memory, association, numeracy (Herold 2003), time administration, low self-esteem and an absence of confidence (Snowling 2005).

*English as an Additional Language (EAL)*, in the context of this research, means a student whose first language is not English. EAL students may use one or more languages other than English in their everyday lives (Bracken et al 2016). The term provides scope for languages other than English to be incorporated into students' educational experiences.

*Inclusion* and effective provisions to support the *inclusive classroom*, involve an educational environment where all students are included, regardless of the level of ability or skill. The United Nations Educational, Scientific and Cultural Organization (UNESCO) views inclusion as “a dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems, but as opportunities for enriching learning” (UNESCO 2005). The fundamental principle of Inclusive Education is that “all children should have the opportunity to learn together” (Elshazly 2016).

## **1.7 Organization of Chapters**

This study comprises five chapters. *Chapter One* presents a background of SpLD and affected students’ problems in reading and writing, which are mandated skills in education. It also discusses the performance of SEND students with dyslexia in learning EAL. The impact of educational services and provisions on the problem is outlined, as well as the problem statement, research questions, purpose of the study, significance of the study, and operational definitions of the relevant terms of the study.

In *Chapter Two*, a literature review will inform different theories that illustrate the theoretical framework, the nature of SpLD and specifically, dyslexia, provisions of educational services for students, and additional cognitive theories. This is combined with a review of the current status and acceptance of SpLD within the UAE context and government initiatives regarding this topic.

*Chapter Three* describes the methods used in this study. A qualitative research-approach to the collection and thematic analysis method of the data was followed, with a case study designed to investigate the effectiveness of educational services and provisions to support students with dyslexia in a bilingual school.

In *Chapter Four*, the results of the study are presented and an analysis of those findings is given. *Chapter Five* includes a discussion of the results of the study, recommendations for future research and implications of practice based on the findings of the study.

## **Chapter 2 Literature Review**

This chapter explores the background issues of the research study, beginning with a discussion of Specific Learning Disabilities, specifically dyslexia, and the current scientific theories as to their cause. This naturally leads to a review of how such cases are diagnosed, the results of which generally include an assessment and the outlining of recommended provisions and/or interventions. The roles of the school staff and parents are clarified. One unique aspect of this study is the bilingual environment of the school, therefore a review of the literature regarding second language acquisition and the complexity this can cause in cases of students with dyslexia or other SpLD is presented, with a further focus on the UAE and its efforts to promote best practices towards academic achievement for all students.

### **2.1 Specific Learning Disabilities**

Specific Learning Disabilities (SpLD) are disorders that negatively impact a child's learning abilities through non-typical neurodevelopment. Traditionally children are diagnosed with SpLD if they have been observed as having difficulty in one or more academic skills that have persisted for at least six months since the initial observation of a potential problem. These early signs include difficulty in reading, writing, and/or numbers and calculation (Kaur & Padmanabhan 2017).

Importantly, the distinction must be made between children who have SpLD and those with an intellectual impairment; SpLD and intelligence are not linked, so a student with SpLD can have advanced intelligence, and one having trouble with reading may excel at mathematics, etc. (Kaur & Padmanabhan 2017).

SpLD symptoms are grouped into types in order to better understand and create effective intervention programs; dyslexia is amongst these.

### **2.1.1 Dyslexia**

Literally meaning “difficulty with words,” dyslexia encompasses any symptoms that involve reading, including reversing letters, words, numbers, and/or sentences; skipping, repeating or substituting; and incorrect or slow reading (Kaur & Padmanabhan 2017). In everyday usage dyslexia is sometimes a general term that refers to SpLD, with professionals in the educational field (psychologists, teachers, counselors, etc.) being more precise in using SpLD as the umbrella term; others outside academia (volunteer organizations, general public, etc.) may use dyslexia to mean any learning disability (Riddick 2012).

Dyslexia is the most common SpLD, accounting for 70-80% of all children with SpLD (ACPN 2020). Miles (1983) focuses on the importance of looking beyond reading when considering dyslexia. In his aptly titled book Dyslexia: The Pattern of Difficulties, he stresses that while delayed reading or other reading-related difficulties are often the first indicator of dyslexia, in fact there is a “cluster of clinical symptoms” that can include difficulties in other areas, such as spelling or writing (Miles 1983). This is important because focusing on one symptom (such as slow reading) can blind the evaluator to other symptoms that may point to an underlying cause, such as poor working memory or other processing deficit (Riddick 2012).

Having an awareness of a broader range of impact can allow for the prediction of other difficulties and allow for more accurate provisions and interventions. For example, researchers have noted that children with dyslexia also often have difficulties with motor skills, short-term memory, physical activities involving balance (such as skipping or hopping), and even daydreaming (Smith-Spark et al. 2004; Nicolson & Fawcett 1994). The challenge is to identify which difficulties are related to diagnosed dyslexia and those that are not. Riddick (2012) recommends researching cognitive

issues that may occur with dyslexia, with the understanding that these defects should be identifiable at an early age; should be noted in other family members as they are often genetic; and that deficits underlying dyslexia are not “outgrown,” they will persist.

## **2.2 Causes**

Understanding the causes of dyslexia is critical to determine a comprehensive and effective intervention program (IDA 2015). Although much research has been done on identifying and understanding various aspects of dyslexia, primary causes have not been determined. Bhandari and Goyal (2004) identify three key areas as potentially influencing the development of learning disabilities: genetic factors, which could be responsible for up to 70% of known dyslexia; neurological factors, involving episodes negatively impacting the nervous system during pregnancy and immediately after birth, or anytime thereafter; and environmental factors, which include negative stressors such as poor parenting, sub-optimal living conditions (poverty and/or malnutrition), or other psychological stressors. There can also be physical issues that result in dyslexia, for example mental impairments such as poor memory or executive function deficits (Brandenburg et al. 2015).

Similarly, Phillips and Kelly (2016) detail a modelling framework that encompasses three levels – biological, cognitive and behavioral – each of which can be impacted by various environmental factors. Furthermore, they discuss the potential impact of self-esteem and image, and how all these factors can overlap and intertwine, influencing the progress and development of students.

Frith (1995) also emphasizes the biological origin of dyslexia that has been impacted by environmental factors leading to cognitive deficits that are reflected in particular behaviors; “the consensus is emerging that dyslexia is a neuro-developmental



disorder with a biological origin, which impacts on speech processing with a range of clinical manifestations” (Frith 2002).

Others emphasize the importance of working memory deficits in children with dyslexia, suggesting that intervention efforts could focus on improving memory skills through a multisensory approach (Phillips & Kelly 2016; Hatcher 2006).

What this demonstrates is that determining the cause of dyslexia can offer insight into effective treatments and intervention programs. If it is determined that an underlying cause is insufficient working memory, programs can focus on building and strengthening neuro pathways to improve and expand memory; if environment is found to contribute towards dyslexia, suitable interventions can be developed that could mitigate these negative influences.

## **2.3 Diagnosis**

Often a child’s parents are the first to notice a possible learning disability, sometimes before anything is even noticed at school, although it is more common for concrete symptoms to become clear in an academic environment. Dyslexia is perhaps seen as an umbrella term for any learning disability by some, because it is usual for reading difficulties to be one of the initial signs of an underlying SpLD (Kaur & Padmanabhan 2017). After an initial concern expressed by a parent, caregiver or teacher, identification and diagnosis can be made by psychologists at the school or a separate clinic.

### **2.3.1 Discrepancy Model**

In order to determine whether a child has dyslexia, traditionally experts have used a discrepancy model. This includes comparing the child’s cognitive assessment results to their academic performance to see whether there is any discrepancy between

them. If there is a substantial difference, where the child has a high cognitive ability but poor performance in school, then dyslexia is assumed.

However, recent research has brought this underlying assumption into doubt, as it has been shown that a poorly performing child with lower cognitive capabilities can benefit from the same interventions as a child with a higher intelligence quotient (IQ) score (O'Donnell & Miller 2011). Instead researchers recommend using a Response to Intervention (RTI) model, where students who are having academic difficulties are tested using a range of set interventions to determine whether they may have a specific SpLD (O'Donnell & Miller 2011).

### **2.3.2 Assessment**

According to Rose (2009) “There is only one point in assessment and that is that it results in action. If no action follows the assessment then there is no point in doing it.” Assessment is critical to diagnosing dyslexia, however, this must be with the intention of providing a path forward to assisting the student. It must include observation of the student in an academic setting, in addition to a documented history of educational provisions; the response (or lack of response) of the student to prior intervention efforts is an important element of a continuous and ongoing assessment program (Troeva 2015).

Rose (2009) developed a 3-level program for dyslexia assessment, including assessment facilitators and recommended provisions. At level 1 is the classroom teacher who makes the initial observation of potential issues within the classroom with differing levels among students. At this point the teacher makes adjustments to their teaching and continues to monitor, with no further diagnosis or determination.

At level 2 the teacher is still the primary assessor, but will request the help of a teacher with more training in dyslexia, including possibly a specialist, again not with

the goal of determining and labeling a student as having dyslexia, but of discussing whether the child would be best served with additional basic interventions or adaptations within the classroom, or rather that more deliberate steps should be taken to assess and assist the child (Rose 2009).

Level 3 is when qualified specialists and/or other educational professionals will be consulted, in addition to the parents and classroom teacher, in order to determine whether an official diagnosis should be made and what further provisions and interventions should be given (Rose 2009).

## **2.4 Provisions and Educational Services**

The goal when administering provisions to dyslexic students is to help them achieve competency in academics and be able to complete their education within a mainstream school. This outcome is dependent on several factors – the level of disability; how early the dyslexia is discovered and an intervention plan initiated; the presence of further personal or developmental problems evident with the student; and other environmental factors, such as family life, community support, etc. (Shapiro & Gallico 1993).

### **2.4.1 Role of School Staff**

The staff at a school with dyslexic students that are involved in educating such students include classroom teachers and their assistants, and the special education team that will work with the teachers, students and parents to design an individualized educational plan (IEP) that is universally supported (Karande & Kulkarni 2005). Rose (2009) emphasizes the importance not only of creating an effective and realistic IEP, but to have classroom teachers who are well-trained and have good awareness of SEND and SEND students.

The school and its staff are also critical in creating a supportive environment, a societal construct that can directly impact the success of the SpLD student through their attitudes and support (Gaad 2004). This is an additional benefit of a SpLD student being part of an inclusive school.

#### **2.4.2 Role of Parents**

The positive collaboration of parents with the school, the student's IEP and the teaching team is likewise critical to the success of the intervention. Rose (2009) specifically mentions the negative impact parents can have on their dyslexic children if they exhibit and transmit their anxieties about their children. This negativity can create a negative environmental factor that can further complicate the child's symptoms and create barriers to their development and ultimate success (Rose 2009).

#### **2.4.3 Intervention Programs**

As mentioned, intervention programs particularly at the primary level are most effective if they are systematic, continuous and frequent, building phonemic and phonic awareness (Phillips & Kelly 2016; Rose 2009; Singleton 2009). Of particular effectiveness are programs that are multisensory – that is, the information is conveyed over several different senses simultaneously so that it is organized and stored in several areas in the brain. This improves short-term memory by training the brain to store and retrieve information from different areas, building stronger connections (Phillips & Kelly 2016). Visual, auditory, kinesthetic and tactile (VAKT) activities have been recognized as perhaps the best way to strengthen those areas of weakness in memory that dyslexic learners experience (Phillips & Kelly 2016; Rose 2009).

### **2.5 Dyslexia and Bilingual Learners**

Of particular concern when considering bilingualism and dyslexia, are challenges in determining the causes of difficulties among bilingual pupils in literacy

and reading – is it dyslexia or is it caused by some aspect of bilingualism? As a term, ‘bilingual’ means being able to use (through reading, speaking, etc.) two or more languages on a daily basis (Baker 2006; Martin 2009). Bilingualism can be further divided into two types: simultaneous, when two or more languages are learned concurrently, such as when children from mixed cultural backgrounds learn two languages from birth; and sequential, when a second or more languages are learned consecutively, such as when a student studies a new language at school (Baker 2006). Either scenario refers to second language acquisition (SLA).

### **2.5.1 Language Acquisition and Retention**

In the scenario where the student learns one language while at home, the first language (L1), and where a second language (L2) is the language of instruction at school, other complications become apparent. When there is no emphasis within the school for the students to retain L1, they are likely to excel in language and literacy proficiency in L2, often at the expense of L1 (Cummins 2000). There are additional factors that can impact the success of students in learning L2 while retaining L1, such as motivation and natural aptitude, importance or emphasis from family and/or the community on keeping L1, etc. (Baker, 2006). In successful cases this is considered ‘additive bilingualism’ because the student has added a second language with a positive outcome socially and cognitively.

In instances where L2 is viewed as superior to L1 for whatever reason, this can lead to environmental stressors that negatively impact self-esteem and confidence, and L1 is gradually lost as it is considered “lesser.” This can further have a negative impact on L2 acquisition and cognitive development and is therefore termed ‘subtractive bilingualism’. It is critical for school programs in a bilingual environment to consider the additive and subtractive elements within the culture and the school environment, as

these impact not only the acquisition or retention of the secondary language (used mainly outside of school), but can lead to poor performance of students in language studies in the dominant language of instruction as well. In Section 2.2 the role of environment in the development of dyslexia was discussed; environment likewise has a direct impact on general studies within the school, outside of the dyslexia context.

### **2.5.2 Dyslexia in a Bilingual Context**

Dyslexia is difficult to recognize in children learning an L2, including ESL, as it is common to consider student problems as due to second language acquisition and the underlying problems of the student are ignored. This can result in a wrong or missed diagnoses of dyslexia (Hall 2001), as difficulties with L2 acquisition can mask indications of possible dyslexia.

Additionally, teachers in the L2 classroom will often assume that any difficulties faced by their students are caused by the difficulties in learning a second language, without considering that there may be underlying issues (Mortimore et al. 2012; Deponio et al. 2000). The United Kingdom (UK) Department for Education and Skills' *Special Educational Needs (SEN) Code of Practice* (2001) details that dyslexic learners will often show indications of dyslexia through irregularities across the curricula; for example, a higher performance level in speaking/listening than reading writing. Deponio et al. (2000) suggest that this differentiation could also be part of potential dyslexia indicators in the bilingual L2 classroom.

Of additional concern is how to modify or extend the definition of dyslexia in order to identify it in a multilingual environment or across linguistic areas. Additional issues that should be considered include language orthographies and differences in international education (age of school entry, education methods towards literacy, cultural differences in language acquisition, etc.) (Rogoff 2003). Different languages

themselves may have a structure, syntax or other feature that requires a different set of linguistic skills and therefore any dyslexia may manifest differently (Goulandris 2003).

Researchers have discovered that even the comparative complexities of different languages directly impact brain development, as the acquisition of those languages with more complex orthographies (English being one of them) influence “the development of reading and cognitive skills that underpin literacy” (Mortimore 2012). Wolf and Stoodley (2008) demonstrated that the acquisition of language, and processing the continually changing language constructs and systems, has an “evolutionary impact” on the brain. However, there is disagreement as to whether there is a single, central mechanism within the brain that underlies reading skills no matter the language; or if there is a difference in what cognitive systems are used in gaining literacy in languages that have, for example, different scripts or other central features (Wolf & Stoodley 2008; Cummins 2000).

### **2.5.3 Challenges for the Bilingual Dyslexic Student**

Ganschow and Sparks (2000) determined that if a student has a particular strength or weakness in the sounds, structure and/or meanings of a language, these will be true regardless of the actual language being learned. AlMannai and Everatt (2005) likewise confirmed that although the languages in certain instances may be different (such as English and Arabic), the underlying causes of dyslexia are potentially analogous. Arries (1999) also determined that for L2 acquisition to be a success, the student must use those specific language skills in which a person with dyslexia is weak in L1. Ganschow et al. (1998) found that difficulties with both acquiring L2 and learning L1 are connected; they devised the Linguistic Coding Differences Hypothesis (LCDH) to create a framework for the difficulties FL learners experience; one result

being that they could attribute some issues to an underlying Learning Difficulty (LD) and not in learning an L2.

In fact, a student with dyslexia will face the same challenges learning L2 as they had with L1, as it requires those same skills that are insufficiently developed in dyslexic learners: sequencing, phonological/phonemic awareness, and short and long-term memory (Wolf 2008). Processing differences associated with dyslexia can also cause listening difficulties (Crombie & McColl 2001) which can further complicate L2 acquisition for the dyslexic student (Ziegler et al. 2003). Additionally, differences in language structure between L1 and L2 (phonology, morphology and orthography) can also have an impact, as these may require differences in cognitive structure, particularly when considering the range of instructional methods for literacy (phonics versus whole word, top-down versus bottom-up, etc.) that different school systems use in countries around the world (Reid 2009).

To an extent, the challenges facing the dyslexic student when learning an L2 can be influenced by the structure of their native language (L1); “the idea of cross-language transfer necessitates the consideration of L1 ability when understanding bilingual learners’ difficulties in literacy acquisition” (Mortimore et al. 2012). There is no consensus on what developmental linguistic deficits may have the greatest effect on dyslexic learners and their acquisition of a second language. Primary possibilities are phonological deficits and speed of processing deficits; both can be linked to dyslexia across languages, but the ways in which they manifest and even the time/level in which they become apparent in individual learners can vary, particularly depending on the complexity level of the language (Ziegler & Goswami 2005). Even so, these aspects “can all affect [a student’s] cognitive skills profile when considering risk of dyslexia



and must be taken into account when programmes of support are designed” (Mortimore et al. 2012).

## **2.6 Inclusive Education in the UAE**

The development of special education in the UAE has gone through significant changes over the last few decades following the foundation of the Federal Government in 1971. The dedicated teaching of students with special needs started in 1979; Alahbabi (2009) described the first SEND classes as SEND students from all levels (KG-12) gathered in a single classroom. Later that was reformed to place students with physical disabilities (such as visual or hearing impairments) in mainstream classrooms, while the other SEND students who had mental disabilities were referred to special centers called ‘center-based educational programs’ (UAE Ministry of Education 2010).

Inclusive education for students with special needs is a recent concept in the UAE, which was presented initially through the *School for All* initiative by the MOE in 2010 (Alborno & Gaad 2014). The need for services within mainstream schools was recognized following an extensive survey conducted by the MOE, which identified the prevalence of children with special needs in mainstream classrooms, comprising mainly speech and language disorders and learning disabilities (Abdat 2010; Gaad 2011).

### **2.6.1 Government Initiatives**

Inclusion in the UAE was initiated by the Sharjah Early Intervention Centre in 1997 such that children with mild disabilities could be provided with equal educational opportunities through appropriate placements which meet their needs (Alahbabi 2009). As a result, special classrooms which were run by special education teachers started to appear in government schools where students (most with learning difficulties, a few with physical and sensory disabilities) were educated. These classrooms operated full-time within mainstream schools, such that interaction with mainstream students was

limited to play time or activity lessons. These early provisions did not include students with severe disabilities, and some students with sensory and physical disabilities were occasionally allowed to enroll in schools; there was no provision of support services.

This exclusionary model of services in mainstream schools was a prevalent trend in the 1980s globally, including in the UK, United States (US) and Canada (Lupart & Webber 2012; Porter 2008; Skrtic 1996). At the time educational support for students with disabilities in public schools in the UAE was based on early intervention schemes starting in Kindergarten (KG) or Cycle 1/Grade 1 (Bradshaw et al. 2004). Children were referred to special classrooms in UAE schools by subject teachers after observation of difficulties in coping with mainstream programs. The referral usually took place following an assessment by a school-based team including an educational psychologist and a speech and language pathologist (Bradshaw et al. 2004). Students in special classrooms were also referred by the Ministry of Social Affairs (MSA) or Ministry of Health (MOH). IQ testing was the main criterion, where students with an IQ less than 75 were referred to rehabilitation centers and those with IQs above 75 were referred to the schools with special classrooms (Gaad 2011). These special classrooms only lasted until Cycle 1/Grade 3, after which students would be placed back into mainstream classrooms if they could progress academically; otherwise they were referred to rehabilitation centers (Bradshaw et al. 2004).

With the introduction in 2006 of Federal Law 29/2006 regarding the Rights of Persons with Disabilities, the UAE began to witness a major transformation of the government's special education policy as more students with learning disabilities were enrolled in mainstream classrooms. The *School for All* initiative was a direct result of the Federal law 29/2006, in which articles 12, 13, 14 and 15 specifically and clearly support the inclusion of disabled students in mainstream schools aided with appropriate

provisions (see Appendix 3). The articles covered all aspects of education for students with special needs: access to equal opportunities in all educational and vocational institutions with the curriculum provided in any appropriate methods (article 12); government provision of means for diagnosis, curricula, communication methods, and strategies for developing accessible learning and physical environments (article 13); government provision of educational and training programs for providers (article 14); and the formation of a government committee to oversee all efforts related to the education of people with special needs (Article 15) (MOE 2010).

The drive for inclusive education has also been reinforced in the UAE national charter, represented by the UAE Vision 2021 (UAE Vision2021 2018). Furthermore, in 2010 the UAE ratified the International Convention on the Rights of Persons with Disabilities (CRPD) (Gaad 2011), reiterating its commitment to the rights of people with disabilities to share an equal status with their able-bodied counterparts in education.

### **2.6.2 Inclusivity in Private Schools**

As mentioned in 2.6.1, the MOE has a more involved role in both the oversight of public schools and the implementation of its programs. Within the private school system, the MOE provides licenses and accreditation for individual schools, and the ministry or other government agencies conduct annual inspections (UAE Government 2020). However, each school determines its own curriculum, and they can vary widely in their support for students with special needs – both in programs and in facilities. The MOE mandates that all private schools must provide appropriate provisions and support for any students they accept with the knowledge that they have a learning disability, but the ministry has not yet completed specific guidelines in this regard (Bradshaw et al. 2004).

The MOE has established a dedicated committee to oversee special needs issues within public schools, and it is tasking this same entity with determining an appropriate program to encompass private schools in the country. This program would include specific requirements for acceptance of students with learning disabilities or special needs into a private school, and for the availability of provisions, accommodations, or any other support mechanisms to benefit these students (Bradshaw et al. 2004).

## **2.7 Conclusion**

The literature review has shown that the detection and diagnosis of SpLD or dyslexia is the initial step in a more involved process. Understanding the potential causes can also impact the search for most effective practices to help students reach their full potential. In the case of this research study, the bilingual school environment adds another complicating factor. Along with the recent initiatives by the UAE government to provide the ideal services and circumstances for all students, the review has revealed the need for such research as the developments are new and the situation somewhat unique. Therefore, the study and answers to the research questions will add value to the literature. Details as to the structure of the research project and its resulting data are discussed in the following chapter.

## **Chapter 3: Methodology**

This chapter provides a comprehensive methodological framework for the study. It sets out the research approach and design, and methods for the collection and analysis of data which is achieved through observations, surveys, interviews and document analysis. Ethical considerations for the study are also covered in this chapter. The strengths and challenges of students with SEND and supportive services were provided and investigated using a qualitative-case study design (Yin, 2014) as well as via a single method approach (Johnson et al 2007; Teddlie & Tashakkori, 2010).

### **3.1 Research Design**

#### **3.1.1 Philosophy of the Paradigms and Methodological Options**

The aim of using interpretivist/constructivist paradigms is to demonstrate the most appropriate methodological approach for this research. The interpretive/constructionist paradigms are popular in special needs investigation in scientific research as emphasized by Avramidis and Smith (1999:27). The impacts of provision of educational services to support inclusive education programs for students with dyslexia in both subjects taught by using L1 (Arabic) and L2 (English) was studied using qualitative methods to enable a deep understanding of how students' academic achievements are impacted by the educational services in both subjects being taught with L1 and L2.

Interpretivist/constructivist researchers argue that reality is subjective and has multiple meanings which people construct through their actions in the social world. It is essentially used to understand human action, and participation in research should be allowed to reflect on the phenomena being studied and to act upon them (Robson, 2002). The interpretive approach studies the individual through small-scale, non-

statistical research, interpreting the specific; in this context the researcher has an inactive involvement and addresses ‘micro-concepts’.

### **3.1.2 Case Study Method**

Case studies are important sources of research data (Cohen et al., 2018, pp. 375-400; Hamilton & Corbett-Whittier 2013). As Punch (2005 in Cohen et al., 2018) suggests, a case study can include a person, a group, organizations, events, roles and relationships. It provides a unique example of real people in real situations, and enables readers to understand ideas more clearly than simply with abstract ideas or theories (Yin 2009 in Cohen, 2018, PP.376-400). According to Creswell (2013, p.97):

*The case study method “explores a real-life, contemporary bounded system (a case) or multiple bounded systems (cases) over time, through detailed, in-depth data collection involving multiple sources of information... and reports a case description and case themes.*

Using a case study in this research allows the investigation of real-life situations in the school’s daily program, with respect to educational provisions representing classroom activities, teaching styles and sample daily interaction within the educational environment. A case study approach enables the researcher to obtain some insight into the implementation process through studying. Case studies can be implemented in education fields (Bassy, 1999 in Cohen et al., 2018, p. 377), to inform decision-making by policy-makers, practitioners and theorists. This is achieved by investigating educational activities in a natural context that also takes into consideration respect for the individuals involved.

### **3.1.3 Qualitative Case Study**

The case study method is a powerful approach according to Merriam (1998), who maintains that “reality is constructed by individuals interacting with their social worlds” (Merriam, 1998, p. 6). In this study, the qualitative case study approach is

adopted and offers the ability to interact with the participants in the field while carrying out their daily practices inside and outside the classrooms, resulting in not only the impact of provisions within inclusive classrooms, but in precious exposure to the realities of inclusive education of native Arabic speakers with dyslexia in an ESL school.

Moreover, Stake (1995) defines four characteristics of qualitative research which are valid for qualitative case studies: *holistic* (considering interrelationships among the educational services provisions, and their impact on the academic progression of the targeted dyslexic students), *empirical* (basing the study on inside- and outside-classroom observations), *interpretive* (relying upon researcher intuition, viewing research basically as a researcher-subject interaction), and *emphatic* (reflecting the indirect experiences of the subjects in an emic perspective).

The type of case study that has been used in this research depended on the ‘discovery-led’ purposes which utilize description, exploration, comparison and explanation (Cohen et al., 2018, p. 377).

#### **3.1.4 Single Case-Study**

The rationale of utilizing a single case study is based on the intent to evaluate the effectiveness of educational services provisions at a single school. The criteria components used to select the school sample included an International school; a school using English as the dominant language to deliver the curriculum and for communication amongst students and staff; and a student population including native Arabic-speaking students with dyslexia. The study sample was a single school, however the research involved multiple units of analysis (the two students). According to Yin (2003), the use of subunits within a single case study enhances insight and allows more in-depth analysis.

Dyer and Wilkins (1991) state that single case studies are preferable to creating a high-quality theory because this approach produces extra and better theory, as well as a deeper insight and understanding of the investigated theme. As Gerring (2004) reports, the more case studies a scientific article has, the less observation time the researcher has to study the cases; therefore a single case study allows for more focused analysis.

In this research, the case-study subject is a mainstream, private school, with two native Arabic students with dyslexia within a general classroom in Year 6 serving as subunit participants of the study. The participants were also chosen as per study criteria: native Arabic speakers, diagnosed with dyslexia, age 10 years or under, bilingual with Arabic as L1 and English as L2, and enrolled in an inclusive EAL school. The students were selected to allow a holistic understanding of the context and to obtain more accurate data about the effectiveness of services offered by the school; they were observed over the course of approximately one month.

Observations provide vital data as they are carried out in ‘real-life’ settings (individualized support sessions, staff meetings classrooms, playtime, etc.). Interviews are then used to confirm whether educational services are provided by stakeholders; observations, field note taking and interviews triangulate the results. The resulting analysis using content thematic analysis (coding), through identifying dominant emerging themes is then utilized (Stake, 2006).

### **3.2 Sample and Setting**

The current study analyses the impact of a private school’s educational services when provided to support a native Arabic speaker with dyslexia to achieve academic success in different subjects taught by using L1 and L2. Two male students in grade 6 from different classrooms taught by different teachers were observed. Both students



speak Arabic as their first language (L1) whereas English is their second language (L2). They were enrolled in an international private school since kindergarten to date.

This study required a sample of an international school whose student population includes native Arabic speakers identified with dyslexia since lower primary school. The case study school was chosen because it meets the criteria requirements, was accessible for research, and had students among its population that qualified for the study as per the subunit, participant criteria. A comparison was made of the challenges faced by those students in subjects taught by using L1 and L2, in order to analyse the effective provisions offered in different subjects taught by English, and Arabic subject.

### **3.2.1 Sample Limitations**

There are several factors that limited this study to one school and two participants. The sample school is the only one that met all the selection criteria for this study that was easily accessible by the researcher. Additionally privacy concerns had an impact, as the study involves education and children; most private schools would not allow access, and public schools follow a strict policy from the MOE regarding security, effectively making those schools likewise inaccessible.

Only two students were chosen as subunits of the study, as they met all criteria for participants. This number was limited by several factors, including the sensitive nature of SEND and its recognition and acceptance (or lack of) in the general society; the low number of students at the school who have been officially diagnosed with dyslexia; and the willingness of parents to participate in the study. The results allow for an indication of the system analysis, however it cannot be generalized.

Even with these limitations, there is value to the research due to the popularity of international schools using English as a first language among Emiratis in the

Northern Emirates, and the lack of qualified research. There is increased academic market demand, however the implementation of an inclusive educational policy in private schools is still limited and not well investigated in the Northern Emirates in comparison to Dubai and Abu Dhabi.

### **3.3 Data Instruments**

This section illustrates the tools that have been used to gather the data. According to Bassey (1999), research offers diverse tools for data collection. It is therefore important to select the tools that are suitable, in order to answer the research questions. In addition, Cohen et al. (2018) recommend using triangulation of data gathering instruments, such as observation and field note-taking, semi-structured interviews, reflexive journals and documents where appropriate, during qualitative research. Furthermore, using multiple sources or methods for data collection allows the development of sound and comprehensive understanding of phenomena, as well as providing the means to test validity (Cohen 2018; Yin 2009; Cohen et al 2007; Patton 1999).

In this research multiple data instruments were used, including observations and taking field notes, semi-structured interviews and e-surveys.

#### **3.3.1 Observations and Field notes**

Observation allows the researcher an opportunity to directly record both nonverbal and verbal interactions with participants (Good & Brophy, 2002), and lies at the heart of many case studies (Cohen 2018). The observation tool was used as a basic, essential step to cover the overall picture of the context. It covered all lessons that targeted students that were included and pulled-out in order to understand the framework of the inclusive context and educational services provided by schools and

parents. The observation instrument was a developmental tool used over the timeline of this study.

Throughout the study, observations were made by the researcher and field notes were consistently documented during subjects taught using L2 (English), including: literacy skills (reading, writing, listening and speaking) in the general classroom and during pull-out sessions; library skills, math, science, designing technology (DT) and physical education (PE) classes. Observations and field notes were also completed in subjects taught using L1 (Arabic), including Arabic and Islamic studies (see Tables 1a and 1b). To avoid confusion between both students' observations, the researcher dedicated week 1 observing S(1) and week 2 to observing S(2), individually. All English and Arabic subject classes were attended for both students, while activities subjects such as PE and DT were only observed for one student due to student absence. For more details, Appendices 8 and 9.

*Table 1a. Schedule of Observations for Student 1\**

Subject <i>what</i>	Objective <i>what</i>	Periods <i>when</i>	Setting <i>where</i>
Math & Science	<ul style="list-style-type: none"> <li>• Long division</li> <li>• Human digestive system</li> </ul>	3	General classroom
Library	<ul style="list-style-type: none"> <li>• Silent reading</li> </ul>	1	Library
Moral Education	<ul style="list-style-type: none"> <li>• Self-esteem</li> </ul>	1	General classroom
Arabic language	<ul style="list-style-type: none"> <li>• Grammar</li> <li>• Reading</li> <li>• Reading/writing test</li> <li>• Definitions</li> </ul>	4	Arabic classroom
English Language	<ul style="list-style-type: none"> <li>• Reading test</li> <li>• Spelling test</li> <li>• Grammar</li> </ul>	3	General classroom
English literacy skills	<ul style="list-style-type: none"> <li>• Persuasive Writing</li> <li>• Reading/spelling</li> <li>• Guided reading</li> </ul>	4	Pull-out Session (ALN classroom)

\* Note: There were no activity classes attended because of student absence.

*Table 1b. Schedule of Observations for Student 2*

Subject <i>what</i>	Objective <i>what</i>	Periods <i>when</i>	Setting <i>where</i>
Math & Science	<ul style="list-style-type: none"> <li>• Long division</li> <li>• Human digestive system</li> </ul>	3	General classroom
PE	<ul style="list-style-type: none"> <li>• Football</li> </ul>	1	General Classroom (playground)
Designing & Technology	<ul style="list-style-type: none"> <li>• Khalifa Tower prototype creation</li> </ul>	1	General classroom (club)
Arabic language	<ul style="list-style-type: none"> <li>• Grammar</li> <li>• Reading</li> <li>• Poem</li> </ul>	2	Arabic classroom
English Language	<ul style="list-style-type: none"> <li>• Spelling test</li> <li>• Expanded noun phrases</li> </ul>	3	General classroom
English literacy skills	<ul style="list-style-type: none"> <li>• Narrative Writing</li> <li>• Graphic organizer, pre-writing</li> <li>• Reading/spelling</li> <li>• Guided reading</li> </ul>	4	Pull-out Session (ALN classroom)

The researcher planned to start with observations that might be developed during the study. The researcher's role was to be a non-participant observer of all details of the context and situation, per Cohen's (2018) distinction that an observer stands apart from the group in the context, while the researcher sits at the back of the classroom, taking notes about the interactions amongst individuals within the setting. However, because the researcher has partial hearing impairment, she sat closer to the targeted student group in order to hear and see properly.

Observations and field note-taking were used to describe the daily details within different settings, which enabled the researcher to build on and to develop the other data instruments. According to Cohen et al. (2018) although observations are pre-eminent in case studies, they are by no means the only source of data (p. 387).

### **3.3.2 Semi-Structured Interviews**

This research also included face-to-face semi-structured interviews. Dawson (2009) notes that during qualitative research data collection, semi-structured interviews are very common. Furthermore, Dawson argues that the researcher uses semi-structured interviews to pursue an in-depth understanding of data as well as to compare and contrast the responses of different participants. As such, it is essential that all participants are presented with the same questions (Dawson, 2009).

An interview schedule was created for this research, which ensured the researcher organised a suitable location and time for each one-to-one interview based on the participants' interest. The researchers were informed of the location and time designated for their interview. The ALN teacher, SENCO, Arabic Coordinator and the two L2 classroom teachers attended individual sessions for their semi-structured interviews; one of the two L1 teachers, the two 1:1 support assistant, and two parents approached in this research responded via social media and email only. Because of the ethical consideration where the researcher gave attention to respect the participants' privacy and anonymity. The researcher looked to conduct the interviews in suitable time and location and by the way that protect school's staff, students' parents Cohen et al. (2018).

The purpose of the semi-structured interviews was to identify the participant's views regarding the effectiveness of the educational services provided to the students with dyslexia within the inclusive mainstream setting. The responses were transcribed verbatim allowing the researcher to maintain accuracy of the data. The interviews included closed- and open-ended questions, and supported impartial analyses by interpreting the collected data from different corners.

### **3.3.3 Documents Analysis**

Document analysis is another data-collecting instrument used in this study to relate the educational services and provisions' effectiveness to the academic development of dyslexic students in both L1 and L2 subjects. Document analysis is frequently used in research for the collection, review, examination and analysis of various forms of text as primary sources of research data (O'leary 2004). The document analysis for this study included the analysis of relevant documents and reports in four main areas:

First, samples of diagnosis reports which indicate cognitive functions, assessment and areas of learning difficulties;

Second, official documents issued by the Ministry of Education on special education and inclusion policies;

Third, relevant literature on academic development for children with dyslexia, factors affecting their progress, EAL with dyslexia, and the educational services provided for both English (L2) and Arabic (L1) subjects; and

Fourth, the Individual Educational Programme plans (IEPs) of the sample students from the school, to see if they are utilised and followed by teachers and to identify the extent of response to the psychological report recommendations.

### **3.4 Gaining Access and “gatekeepers”**

The issue of access and gatekeepers was of particular importance in this research as it involves children and academic information. *Gatekeepers* are those who monitor access, and their permission is required in order for a qualitative research study to be conducted in a given environment as they possess the authority to permit or deny such activity. In the case of a study site (such as a school), a letter can be issued to the gatekeeper explaining the research study, the methods, schedule, and potential impact.

In the case of e-surveys or other one-on-one methods, advanced permission can be obtained from the participants (Cresswell 2013).

At an early stage of this research, the informed consent was obtained from the principal of the primary school branch (see Appendix 4); this permission was the first step to have access to the school. The researcher held meetings with the SENCO and targeted students' classroom teachers in person to discuss the proposed research and the ethical considerations. Furthermore, the researcher emailed all stakeholders, including the principal, SENCO, and classroom teachers after meeting them, attaching the researcher declaration, study proposal and the university acceptance and enrollment certificate.

In addition, the researcher obtained parental consent from the students' parents, with the SENCO's coordination, via written consent letter (see Appendix 4). This was done after an in-person discussion between the parents and the researcher, which addressed the research scope, benefit, confidentiality and protection of participants' rights and researcher data tools (including interviews, observations, documents, student artefacts, and official reports). Gaining access to school and facilities in L2 (English) classrooms was smooth, however, gaining access to L1 (Arabic) classrooms was not permitted due to administration issues in coordination with the Arabic department.

Some data weren't shown to the researcher in this study out of respect for the confidentiality of students and families in community. For example, this study required any data that measured students' progress in academic aspects, however classroom teachers were one of the highlighted gatekeepers who prevented access to some data such as tests and final grades.

### **3.5 Ethical Considerations, Confidentiality & Anonymity**

According to Cohen et al. (2018) the researcher needs to obtain consent from the participants that will be observed, interviewed and questioned. In addition, it is highlighted that ethical research involves an agreement between the researcher and the sample group about the way the data will be utilised. The researcher guaranteed that all data collected in this research study would not be shared with any third party, and that any identifying information would remain entirely confidential. In addition, the researcher followed ethical interview protocols (Qu & Dumay 2011) with all interview participants related to the target students in this research (see Table 2). The researcher obtained permission from all participants, and scheduled the time and setting for the interviews. All in-person interviews were conducted at the participants' offices, at different times according to their schedule. All participants received both a soft and hard copy of the interview questions before the meeting.

*Table 2. Interview Participants*

In-Person	Written <i>Via email/social media</i>
English Classroom Teacher 1	Arabic Classroom Teacher 1
English Classroom Teacher 2	1:1 Support Assistant 1
SENCO	1:1 Support Assistant 2
ALN TA	Parent 1
Arabic Coordinator	Parent 2

The interviews were recorded, with permission, and transcribed, including the researcher's declaration and questions. Interviews conducted in Arabic were transcribed and then translated into English. For those interviewees who responded via email or social media, ethical considerations were likewise respected.

All interview transcriptions were reviewed by the respective participants (interviewees), which allowed them to make any corrections or revisions they felt necessary or appropriate before the data collection phase was completed.

### **3.6 Timeline**



It took nearly two months to select the sample group at the school. The parents' permission was the next step after getting informed consent from the principal of the primary branch, based on the SENCO's guidance. Gathering data took an additional month, with two weeks spent conducting the observations and interviews, followed by two weeks to wrap up and complete the missing data and documents.

### **3.7 Coding and Content Analysis**

Qualitative analysis is necessary to reduce a copious amount of data to be manageable and comprehensible. Content analysis is a way of respecting the quality of the qualitative data (Cohen et al., 2018) and is a common way of managing and comprehending data in qualitative research. Cohen et al. (2018) define content analysis as a process which reduces the material in classifying many words of the texts into fewer categories. Coding textual sources is achieved by giving a code, name, or label to a piece of the text, while non-textual material requires annotation and notes which are added with coding. Codes might be descriptive, potentially including events, activities, situations, processes, perspectives, relationships, etc. (Cohen et al., 2018, p. 674).

#### **3.7.1 Thematic Analysis**

Thematic analysis is a method that depends on the coding, and is a method of analysing qualitative data. It is usually applied to a set of texts, such as interview transcripts. The researcher closely examines the data to identify common themes, topics, ideas and/or patterns of meaning (Cohen et al., 2018). There are various approaches to conducting thematic analysis, but the most common form follows a six-step process:

- 1) Familiarization. Conduct a complete overview of all collected data before beginning the analysis.

- 2) Highlighting. Single out short sections of the data, and devise shorthand labels to describe their content.
- 3) Generating. Looking at the labels, identify patterns and begin to develop themes.
- 4) Reviewing. The themes should then be compared to the data, to ensure they are accurate representations.
- 5) Defining. Once the themes have been reviewed and confirmed, a final list can be constructed that includes definitions of each theme.
- 6) Writing. Complete an analysis of the data, based on the themes.

### **3.8 Conclusion**

This chapter outlined the method and methodology of the research project, which is a qualitative, single-case study. The data instruments were reviewed, including observations and field notes, semi-structured interviews and documents analysis. The importance of access and gatekeepers highlighted the difficulties the researcher faced in some aspects of the study, while ethical considerations and the privacy of the student participants was emphasized. Having reviewed the analysis methods chosen for the study, the next chapter presents the data and results of that analysis.

## **Chapter 4: Findings and Discussion**

This chapter presents the findings from a study of educational services provisions for native students with dyslexia, resulting from triangulation in order to develop a comprehensive understanding of phenomena (Patton 1999, p. 1189-1208) – including Observation and Field Notes, Semi-structured interviews and Documents Analysis. A discussion section will include the thematic analysis which connects all data together in order to answer the research questions as outline in Chapter 1.

### **4.1 Findings from Observations and Field Notes**

#### **4.1.1 School Environment**

The school investigated in this research follows International and UK curricula, where the majority of students enrolled speak English as an Additional Language (EAL). It consists of grades 1 to 13; however, per UAE Ministry of Education directives there was a realignment of grade levels, whereby the students under study in this research were shifted from grade 4 (primary) to grade 6 (secondary). They are in a unique situation in which they fall under teaching and administration staff from the secondary level, but under the primary level for subjects taught in Arabic (Arabic language, Islamic studies and social studies).

English language is a dominant language in this setting, with Arabic and French regarded as Foreign Languages. Arabic is covered according to the UAE Ministry of Education's requirements, with half as many courses as English subject periods.

Although not having an official philosophy of inclusive education, the school offers the opportunity for students with dyslexia to be included within general classrooms and to be provided with educational services. These services are not limited to dyslexia, but also are available for students reflecting a lower level due to language

barriers. The school provides these services based on structured inclusion processes for SEND students as shown in Table 3.

*Table 3. Inclusion Processes for SEND students*

<i>Step 1</i>	Class teacher identifies student having difficulties to grasp as peers
<i>Step 2</i>	Alternative teaching & learning strategies are implemented as differentiation; if all attempts fail, the student is referred for assessment.
<i>Step 3</i>	Classroom teacher, ALN TA and SENCO notify the student's parents in writing.
<i>Step 4</i>	Once professionally diagnosed and notified by the parents, the school team will establish an IEP.
<i>Step 5</i>	Pull-out sessions are arranged depending on the child's needs.

#### **4.1.2 Observation of Student 1**

S(1) has been diagnosed with cognitive and learning disabilities. He has an Individualized Education Plan (IEP), 1:1 support assistant (since grade 2) and daily, 50-minute remediation pull out sessions for English literacy and guided reading using targeted interventions and strategies.

Several observations of S(1) were conducted within English, math, science and Arabic inclusive classrooms, as well as the pull-out sessions. S(1)'s school attendance is irregular, which leads to missing activity subjects such as PE and Design & Technology (D&T). (Details and field notes can be seen in Appendix 9.)

##### **4.1.2.1 English**

S(1) is included within the general classroom. Reading expectations in grade 6 are more rigorous and the students are expected to perform individually for an extended period of time. The primary special educational service provision for S(1) was a 1:1 support assistant. There were no assessment modifications or accommodations provided for S(1), other than having questions read to him (without comprehension help); the support assistant was pulled to assist with another, non- dyslexic student; S(1) remained focused on trying to read, using his finger to follow the words on the page.

#### **4.1.2.1.1 Grammar**

Several different instructional activities were demonstrated in the inclusive classroom, with the 1:1 support assistant sitting alongside S(1). For those activities where the students were asked to integrate and work on a task together, S(1) became super active, engaged with the VAKT teaching style. When the teacher performed an assessment where each student was given the same task to perform individually, the 1:1 support assistant acted as S(1)'s collaborative partner, with S(1) using limited social skills; the 1:1 support assistant was more interactive, breaking down the concepts into smaller parts, and using body language, facial expressions, etc. to activate S(1)'s interest; in this way the assistant took on a major role, while the classroom teacher had a minor impact in comparison; S(1) was willing and excited to learn. The use of a smart screen in the classroom was somewhat successful, in that S(1) was able to respond to the teacher's questions, but only after a long pause.

#### **4.1.2.1.2 Library**

S(1) is included with peers at the library, but does not have a 1:1 support assistant. S(1) was off task, talking and disruptive. In the presence of the teacher he was attentive and focused, but this changed once the teacher moved on to other students.

#### **4.1.2.1.3 Math**

S(1) is included in the math classroom along with a 1:1 support assistant; there is also an ALN TA present to assist anyone. After modelling the problem, the teacher had the students work on problems individually or in pairs; S(1) was observed working only with the 1:1 support assistant, and struggled even with simpler problems. There was a large gap between the work S(1) could do and the other students in the class.

There was modification of the curriculum for S(1), assessments were not observed. He was comfortable and confident working differently than peers as long as

he was integrated within a social context; i.e. manipulating flash cards, using a white board, working interactively with the 1:1 support assistant. The assistant again used body language and expressions to engage S(1); also verbal cues were noted, where S(1) was predicting the answer but would look to the 1:1 support assistant for confirmation. He would check his work by comparing with his friends. Overall S(1) demonstrated low self-esteem in math, where he was noticeably uncomfortable and unconfident.

#### **4.1.2.1.4 Science**

S(1) is included in the science classroom, along with a 1:1 support assistant, where reading literacy is part of the curriculum. The lesson was conducted through a video, class discussion, and a worksheet. S(1) showed interest in the video, but did not seem to have full comprehension and was off task.. All students were given the same worksheet, with no differentiation for S(1). The 1:1 support assistant tried to reinstruct the lesson; S(1) was responsive, but clearly exhausted. He was less engaged and inactive overall.

#### **4.1.2.2 Pull-Out Sessions**

The ALN TA coordinates with classroom teachers to create a parallel curriculum for SEND students and others, where they are taught the same general topics as in the general classroom but with modified content. Work during the sessions is both individual and with a partner/peers; but S(1) doesn't interact with peers, only with the 1:1 support assistant.

##### **4.1.2.2.1 Persuasive writing**

This subject is taught using a smart screen with attractive fonts and colors. S(1) is one of three students in the class, which he attends with his 1:1 support assistant. The assistant was observed trying to elicit answers from S(1), but ultimately wrote her own answers as he seemed moody and unable to concentrate or interact.

Ultimately, the assistant plays an effective role, moving to different literacy skills while encouraging and working with S(1) in ways to best keep him engaged and focused.

#### **4.1.2.3 General Classroom -- Arabic**

S(1) is included within Arabic language classrooms, without a 1:1 support assistant. The Arabic language teacher had not been informed about the research project or investigation/observation, and in fact disagreed with S(1)'s assessment as dyslexic, feeling S(1) is similar to about 40% of his students. He did not know about Dyslexia or SPLD, however he was concerned and passionate towards his students.

S(1) showed much greater confidence in the Arabic classroom compared to English; he was active and engaged, although did not seem to have full comprehension. The teacher suggested that S(1) was an average student. S(1)'s mother tutors him at home, so he comes to class having practiced and with completed homework.

Assessments were not modified in any way. S(1) sat without working on his exam paper for ten minutes before abandoning it; once the teacher noticed, he attempted to help by reading the question and explaining, but he is unable to do so for every question and for each student who may ask. S(1) was comfortable with the teacher and stated the exam was "not so bad."

##### **4.1.2.3.1 Islamic studies**

S(1) is included in the general Islamic studies classroom, taught in Arabic, without a 1:1 support assistant. The teaching style was traditional – teacher-centered, with a textbook and worksheets. S(1) was slow to answer questions, sucking his fingers or biting nails, and his peers didn't give him opportunity to answer; he copied their answers. S(1) struggled with abstract meanings or answering deductive questions.

There was no curriculum modification or differentiation; the teacher relied on group work and discussions, which kept S(1)'s interest as he wanted to collaborate with peers, but without understanding the task.

#### 4.1.2.4 Conclusions

A summary of the conclusions after completing observations of S(1) is shown in Table 4.

*Table 4. Summary of notes for Student 1 Observations*

	Provisions	Class Style	Notes
<b>English</b>			
Reading	1:1 support assistant	Individual work	Focused and trying Assistant only allowed to read questions Assistant pulled to help others No accommodations or modifications
Grammar	1:1 support assistant	Work in peer groups Individual work Smart Screen	Willing and excited Assistant more interactive Responded to kinesthetic style
Library Math	1:1 support assistant ALN TA Curriculum modification	Individual work Work in peer groups Individual work	Off-task and distracting others Low self-esteem Would not work with peers Responded to interactive assistant Clear gap between S(1) and class peers
Science	1:1 support assistant	Video Class discussion worksheet	Exhausted and not engaged
<b>Special Sessions</b>			
Pull-Out Sessions	1:1 support assistant ALN TA	Work in peer groups Individual work	Would not work with peers, only the assistant
Persuasive Writing	1:1 support assistant ALN classroom	Individual work	Moody, not cooperative Sometimes assistant wrote own answers, but overall interactive and effective
<b>Arabic</b>			
Language Studies		Traditional – teacher centered, with textbook and workbook	Shown greater confidence No accommodation, but teacher tried to help with reading test questions as possible AT(1) not aware of SEND/dyslexia, considers S(1) on par with 40%
Islamic Studies		Traditional – teacher centered, with textbook and workbook Group work and discussions	Slow to answer, copied peers Struggled with abstract ideas and deductive questions Responded well to working with peers, but lack of understanding



### **4.1.3 Observation of Student 2**

Student 2 (S(2)) was observed in inclusive English (including science and math) and Arabic language classes, in addition to pull out sessions with a small group for English literacy skills and guided reading within the ALN TA teaching room. (Details and field notes can be seen in Appendix 10.)

S(2) is a dyslexic student who has been enrolled in this school since grade three, when he was diagnosed with dyslexia as well as having weak visual sense (has corrective eyewear). He appears well-behaved, but not social with other students only his 1:1 support assistant and other adults at the school; there is less monitoring and communication by the parents with the school staff. Despite his learning challenges he was moved from grade 4 to grade 6, as per government directive.

S(2) has been provided with an Individualized Education Plan (IEP), 1:1 support assistant (since grade 3) and remediation sessions where he is pulled out for 1-2 50-minute sessions daily for English literacy and guided reading.

#### **4.1.3.1 Reading**

The classroom English teacher (ET(2)) teaches English, Math and science subjects, where S(2) is included within the general classroom. S(2) was responsive to brief encouragement from the teacher at the beginning of the class, which was taught using an “acting out” strategy, using presentation skills to elicit assessments by the students; all students were motivated, S(2) was on task but not interacting at all with the teacher or peers.

##### **4.1.3.1.1 Grammar**

The class was interactive as students were invited to a carpet to sit and discuss the lesson. S(2) was fully motivated and interested to approach the teacher and to change routine. ET(2) used pictures and puzzles as part of the lesson, and music to

reinforce; S(2) was observed following along and accurately answering questions from the teacher; he was pulled out of this lesson in the second hour.

#### **4.1.3.1.2 Spelling**

S(2) was observed having a spelling assessment during this inclusive class. He has a modified test different than his classmates, based on his cognitive and learning disability. The spelling test was conducted with another TA and he received low scores; when working independently his scores were even lower.

#### **4.1.3.1.3 Math**

According to parent feedback, S(2) is strong and motivated to work in math. His classroom teacher (ET(2)) plays a positive role in reinforcing student learning through her speech, working towards greater student. The 1:1 support assistant appears challenged by S(2), acting nervous and unsure.

S(2)'s seating in this class makes it difficult for him to access what is written on the board, causing him to go off task. The 1:1 support assistant repeated instruction on the small white board. S(2) is interested and motivated but slower than his peers, completing one problem in the time it takes the others to finish three.

The teacher does not focus on S(2), but doesn't ignore him either; her assessment style is to call small groups of students with a homogenous ability level to evaluate their understanding; this helps those struggling to avoid embarrassment. S(2) was observed attempting to complete problems individually, but needed more time.

#### **4.1.3.1.4 Science**

S(2) is included in science. He was observed daydreaming during the lesson, while the 1:1 assistant was writing the key points of the lesson in order to help him separately. The lesson was taught in a traditional style, with the teacher writing on the board and the students copying answers. S(2) worked with peers but depended on

copying answers from the 1:1 assistant. He seems more dependent when he loses motivation because of the teaching style or difficulty of the material.

#### **4.1.3.1.5 Designing & Technology**

S(2) is included in this subject which focuses on science, technology, engineering, arts and mathematics (STEAM). The teacher was friendly and effectively interactive. There was no distinction between students because of their academic level, only collaboration and responding to structured roles. S(2) was an enthusiastic participant. He was shown to be collaborative and motivated to listen and follow instructions. Moreover, he was tasked with explaining his work to others, which can be difficult, but his teacher kept reinforcing him and pushing him further to do it with extra time. It was the first time that S(2) was observed as a human who has feelings and impact on his surroundings, he seemed to be flying free of academic conditions. He spoke freely but brokenly, collaborated, and responded to all, moving and using motor and sensory skills efficiently.

This was in stark contrast to his demonstration in classes with a moral education subject, where he was lost and off-task. The lesson had complicated philosophical terms and concepts, and additionally was taught in a traditional style which killed S(2)'s motivation.

#### **4.1.3.2 Pull-out Sessions**

Both S(1) and S(2) are tutored by the same ALN TA who is teaching EAL students, those with dyslexia or otherwise at a lower academic level, in small, mixed groups of 3-5 students. The students are dependent on the teacher, but the 1:1 support assistant follows S(2).

S(2) is confident to speak, participate, express himself, and discuss with his peers and the ALN TA; he is engaged and friendly. Whereas in other contexts he

remains rather silent, in this class he interacts positively with the ALN teacher. After attending Arabic lessons, S(2) becomes nervous and off-task within the ALN classroom. However the ALN TA efficiently manages his behavior, demonstrating passion and rapport; S(2) interacted with her confidently and tried his best to share answers, which were mostly accurate. He finds difficulty in visualization of the written word; he has good comprehension, but is limited when speaking with others. He was engaged most with drama and story-telling instructional method. He did not need the 1:1 support assistant in this session.

S(2)'s IEP has not been updated since last year; there is no particular intervention for reading and writing, other than using visual aids and media with games within a social context. S(2) was ultimately removed from the pull-out sessions for reading.

#### **4.1.3.3 General Classroom -- Arabic**

The Arabic class for S(2) is on the primary school campus and taught by primary teachers. It has already been discussed that the students in grade 6 are technically part of the secondary school, but there are some aspects of their schooling that is still overseen by staff in the primary section (see Section 4.1.1). This complication was revealed during the course of the study.

The teacher had not been notified of the study, and was not aware that S(2) had a psychological report and had been formally diagnosed with dyslexia. Coordination in primary school seems to be disorganized; the teacher and Arabic coordinator didn't permit the researcher to continue until verbally informed in person by the SENCO. This same scenario occurred with S(1)'s Arabic teacher and the Arabic staff in the primary section, resulting in a clash between the Arabic teachers and administration.

There is no 1:1 support assistant and no ALN (TA) in the class. S(2) is regarded as all students who have fallen behind; he sat with a homogenous group, and was bullied.

The teacher followed a traditional method, focusing on students with a higher ability level; the remaining copied from the board. Some effort was made to include music and engage the students, however S(2) was off task throughout and unable to complete the work as he needed extra time and physically he was unable to see the board (located behind him) (see Appendix 1). There was no accommodation, although he was motivated and gave attention to the national song because it was about UAE.

#### 4.1.3.3.1 Spelling

S(2) was scheduled to have an assessment, however the researcher was not allowed to remain in the classroom and was asked to leave by the teacher.

In Arabic classes S(2) appeared as if he was absent, when he was in fact in the class. In addition to bullying by peers, he doesn't interact or participate; whether because of his inability to access the curriculum, the lack of supportive provisions, or the manner of his peers who were unable/unwilling to collaborate with someone having SEND or at a lower capability level.

#### 4.1.3.4 Conclusion

A summary of the conclusions after completing observations of S(2) are shown in Table 5.

*Table 5. Summary of notes for Student 2 Observations*

	Provisions	Class Style	Notes
English			
Reading	1:1 support assistant	Encouragement "Acting out" strategy	Responsive On task but not interacting with teacher or peers
Grammar	1:1 support assistant	Interactive, on carpet Pictures, puzzles Music	Followed along and accurately answered questions
Spelling	1:1 support assistant Modified assessment	(observed during assessment)	Performed best with 1:1 assistant; lower score with different TA;

Math	1:1 support assistant	Working towards independence Group assessments	even lower score when working independently Seating arrangement is difficult Motivated and tries to work independently, but slower and needs more time
Science	1:1 support assistant	Traditional style Work with peers	Daydreaming and not interested Enjoyed working with peers, but copied answers from 1:1 assistant More dependent with less motivation
Design & Tech	1:1 support assistant	Interactive Peer collaboration	Highly motivated and collaborating
<b>Special Sessions</b>			
Pull-Out Sessions	1:1 support assistant ALN TA	Work in small peer groups Aids and assistive tools Smart screen	Confident, vocal and engaged Support assistant not needed Difficulty visualizing written word Engages with drama and storytelling
<b>Arabic</b>			
Language Studies		Traditional Some use of music	Focus on higher-level students No accommodation Teacher not aware of SEND/dyslexia, considers S(2) on par with all lower level students Off task throughout, bullied by peers
Spelling		(researcher not permitted to observe)	

## 4.2 Findings from the Interviews

The interviews allowed for a wider understanding of how the educational services were employed to support dyslexic, native Arabic students at a mainstream school. All interviewees were shown the interview questionnaire before meeting (see Appendix 13), with appointments then scheduled according to interviewee availability. The sample studied included internal support for the student (school staff) and external support (parents). Interviews were conducted face-to-face and via text sent through social media as summarized in Table 6.

*Table 6. Interview sample and method*

Internal support		
Secondary	Face-to-Face	English Teacher 1
		English Teacher 2
		SEND coordinator
		Teacher Assistant
	Written	Support Assistant 1
		Support Assistant 2
Primary	Face-to-Face	Arabic Coordinator
	Written	Arabic Teacher 1
	Declined	Arabic Teacher 2
External support		
	By Phone	Parent of S(1)
	Written	Parent of S(2)

#### **4.2.1 Semi-structured interviews with Classroom teachers**

Analysis of the teachers' responses allowed the following themes and subthemes to emerge, with their summarized responses shown in Table 7:

1. Attitude toward inclusive education for dyslexic and EAL learners
2. Experience with teaching in an inclusive classroom and EAL
3. Special needs/challenges of targeted students with dyslexia
4. School system and Educational services (provisions) for dyslexia
5. Promoting students' primary language (Arabic) to strengthen English Language skills
6. Recommendations to improve provisions for SEND with dyslexia

##### **4.2.1.1 Attitude toward inclusive education for dyslexic and EAL learners**

Both ET(1) and ET(2) agreed with inclusive education for EAL learners within mainstream schools using a British curriculum. ET(1) emphasized its importance for all students in the class, not just the dyslexic student. ET(2) likewise stressed that all students benefit from an inclusive classroom as this builds social skills, relationships, respect and tolerance.

#### **4.2.1.2 Experience with teaching in an inclusive classroom and EAL**

Both teachers have extensive experience in teaching in an inclusive classroom with various SEN, however the addition of EAL is challenging. While ET(1) has had Continuing Professional Development (CPD) training and experience with students having various needs in the UK, he has not been trained specifically in dyslexia. ET(2) also acquired most of her knowledge and experience with dyslexia while working in the UK, including having students in her classes and dyslexia -specific CPD; however she feels that the school is unable to offer CPD in dyslexia to staff currently due to changes in the school structure.

#### **4.2.1.3 Special needs/challenges of targeted students with dyslexia**

ET(1) noted that S(1) had English reading struggles common to EAL, and did not show dyslexia difficulties in math. He was unable to identify where S(1) would fall on the spectrum, and whether he would have similar struggles in L(1) (Arabic). S(2) has trouble with verbal understanding and memory; therefore ET(2) expects S(2) to have these same difficulties in an Arabic classroom as well. ET(2) also felt that with Arab students it can be difficult to determine whether they struggle because of ALN or EAL needs.

#### **4.2.1.4 School system and educational services (provisions) for dyslexia**

According to the both ET(1) and ET(2), the school system is providing students with efficient educational services for transition year students (Grade 6). Both ET(1) and ET(2) also stated that teachers are given a register of individual children's notes about SEN and EAL at the beginning of the school year, in addition to notes from previous teachers.

ET(1) discussed the transition between primary and secondary; there are no IEPs in secondary, however S(1) has a Support Assistant who coordinates with ET(1)



and the secondary SENCO. ET(1) also works with the SEND department and ALN TA to create a parallel curriculum for pull-out sessions. He feels that S(1) is gaining confidence. ET(2) likewise coordinates with the Support Assistant, ALN TA and SEND department as requested; she also mentioned that while the plan is created in school it is shared with the parents.

#### **4.2.1.5 Promoting students' mother language (Arabic) to strengthen English Language skills**

Both ET(1) and ET(2) felt that students could benefit by having a bilingual 1:1 support assistant. This is more critical when the student is younger; both teachers emphasized that by secondary the students, enrolled in a British curriculum school, should be immersed – thinking and talking in English. Having bilingual help at that point could impede fluency.

#### **4.2.1.6 Recommendations to improve provisions for dyslexia**

According to ET(1) the child should work by different supportive assistants on a case-dependent basis, with an emphasis on developing social skills; by secondary (Grade 6) students will need to be more independent. Parents should be realistic about the student's abilities present and future, and be mindful of attendance as repeated absences have a particularly negative effect on academic achievement in dyslexic students.

ET(2) likewise stressed the parental role and acceptance of differences in children, who learn differently and have different struggles. She also mentioned the importance of developing social skills and their impact on academic achievement, and the need for early screening.

*Table 7. Classroom Teacher Interviews summary*

1	Attitude	Inclusive education in mainstream schools Benefits all students, not just dyslexia
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2	Experience	<p>Experience teaching in inclusive classroom</p> <p>Limited experience in bilingual school</p> <p>Current school unable to offer dyslexia CPD at the moment</p> <p>ET(1) – no formal training in dyslexia</p> <p>ET(2) – training in SEN (personal time)</p>
3	Challenges	<p>Difficult to determine if problem is SEN or EAL based</p> <p>ET(1) – unable to determine if SEN or EAL based</p> <p>ET(2) – expects S(2)'s difficulties to show in both languages</p>
4	Provisions	<p>Teachers are given notes from prior years</p> <p>Teacher coordinates with support assistant, TA ALN and secondary SENCO</p> <p>IEP plans are shared with parents</p>
5	Primary language	<p>Bilingual support assistant helpful</p> <p>Bilingual help in primary years</p> <p>Immersion critical in secondary years for fluency</p>
6	Recommendations	<p>Emphasis on developing social skills</p> <p>Work more towards independence in secondary</p> <p>Parental acceptance</p> <p>Early screening</p>

#### **4.2.2 Semi-structured interviews with SEND department staff**

Face-to-face semi-structured interviews were conducted with the SEND coordinator (SENCO) and Teacher Assistant (ALN TA). The Support Assistants declined face-to-face interviews and instead their responses were closed and written in documents sent by e-mail (see Appendix 13). The analysis of SEND department staff responses revealed the following themes and subthemes, with a summary shown in Table 8:

1. School system and SEND Services provided
2. Parents' role
3. Importance of strengthening L1 (Arabic)
4. Recommendations to improve the educational services for the EAL (native Arabic) students with dyslexia

##### **4.2.2.1 School system and SEND Services provided**

Regarding identification and notification of classroom teachers, the SENCO collects a list of students who have dyslexia at the beginning of the school year, emails

the list to teachers and makes it available on the school's electronic system; the information includes student needs, teacher support methods, etc. which can also be accessed by meeting directly with the SENCO. The ALN TA has access to medical and/or psychological reports, along with prior academic performance, and directly contacts teachers electronically and in person.

In cases where the student has not been previously identified, any concerns noted by the teacher are relayed to the ALN TA, who observes the student and, based on set benchmarks, makes recommendations for accommodations the teacher can make. In the event these are not successful then the parents are informed and a referral for further evaluation is made. Based on diagnosis, an IEP is collaboratively developed (with SENCO, ALN TA, 1:1 support assistant, teacher, parent, and student). IEPs are reviewed at least each year, sometimes each term.

Educational services provided include 1:1 support assistant; ALN TA who conducts small-group parallel pull-out sessions; and various general classroom strategies such as cover overlays, use of bullet points on smart screens, etc.

#### **4.2.2.2 Parents' role**

All agreed that parents play a vital role in supporting students in general, and in particular students with dyslexia; they continue to work with the students at home, and have the main responsibility for their children. Both the SENCO and ALN TA emphasized that greater partnership and teamwork between parents and teachers/school staff is needed.

#### **4.2.2.3 Importance of strengthening L1 (Arabic)**

All agreed that strengthening L1 (Arabic) would lead to stronger skills in L2 (English); and they recognized a discrepancy between the quality and quantity of services to support students in Arabic classrooms as compared to English classrooms

within the school. They recognized the importance of L(1) fluency, since additional languages are learned on the basis established by learning a primary language.

The interviewees likewise noted a difference between the Arabic department at the primary and secondary levels, with the primary Arabic subject teachers less aware about dyslexia and utilizing the traditional, teacher-centered class style; and the secondary Arabic department was noted as having an efficient coordination of dyslexic students and provisions. The students under study in this research, although they are in secondary, fall under the scope of primary for Arabic as they are in grade 6 and this is regarded as a transition year in the school.

**4.2.2.4 Recommendations to improve the educational services for the EAL (native Arabic) students with dyslexia**

The SENCO stated training of staff and teachers is essential, which is unfortunately limited in this region; likewise early screening, working towards shifting the cultural mindset, and updating official policies towards inclusive education. The ALN TA also mentioned training, but placed more emphasis on collaboration and communication between all concerned, including Arabic teachers, and utilizing new methods and methodologies. The Learning Support Assistants either declined to answer or stated that they had nothing to suggest.

*Table 8. SEND department staff Interviews summary*

1	School system and provisions	Inclusive education in mainstream schools
		Information shared from prior years
		Set procedure for determining new SEND students
		1:1 support assistant
		Small-group pull-out sessions with ALN TA
2	Parents' Role	Modifications within the general classroom
		Main responsibility for children
		Continue school efforts at home
		Greater partnership/teamwork needed

		Stronger primary language leads to stronger additional language
3	Primary language	Discrepancy between services offered in English and Arabic classrooms Discrepancy between SEND organization in Arabic department at primary and secondary levels
4	Recommendations	Training of staff and teachers Early screening Shifting the cultural mindset Greater collaboration and communication among all

### **4.2.3 Semi-structured interviews with Arabic department**

The coordinator of the Arabic department in the primary school participated in a face-to-face semi-structured interview; Arabic teacher 1 (AT(1)) shared his closed responses via social media, while Arabic teacher 2 (AT(2)) declined to be interviewed. Analysis revealed the following themes, with a summary of responses given in Table 9:

1. Inclusive education for dyslexic and EAL learners
2. School system and Educational services (provisions) for dyslexia
3. Intervention for students with Dyslexia
4. Recommendations to improve provisions for dyslexia

#### **4.2.3.1 Inclusive education for SEND and EAL learners**

Both the Arabic Coordinator and AT(1) have over three decades of teaching experience, respectively. Both agree with inclusive education, and they believe that this school is an inclusive school, including in the Arabic department.

#### **4.2.3.2 School system and Educational services (provisions) for dyslexia**

The Arabic coordinator stated that they have inclusive classrooms where dyslexic students are attending with 1:1 support assistants. Additionally the students have IEPs -- all students showing poor performance, whether dyslexia or with low academic ability. The Arabic department receives a list of students from the SENCO who have been diagnosed with medical or psychological issues, or any other SEND

concerns; sometimes an entry only has the student name with no details, and sometimes the Arabic department disagrees with the SENCO's determination (cites cultural differences). There are classroom interventions such as an enrichment reading plan.

According to AT(1) there is poor coordination between the Administration staff and general classroom teachers. This is in contrast to the Coordinator, who claims that the coordination among all staff at the primary school is excellent. Weekly lectures have been organized to further develop teaching skills, with topics such as question styles, critical thinking, etc.

Accommodations and modifications are made within the classroom, but are not reflected in the official grading notebook; it is designed as an encouragement for students only. Additionally, the classroom teachers will create leveled materials for the same task to accommodate students.

#### **4.2.3.3 Intervention for students with Dyslexia**

Regarding interventions used to support students with dyslexia, a guided reading program has been adopted this year although it has not yet been implemented. The program involves students reading books from the library at home and teachers creating activities based on this approach, with some variance between teachers.

#### **4.2.3.4 Recommendations to improve provisions for dyslexia**

Both the Coordinator and AT(1) stated that greater family support is needed, the coordinator further stated that classroom teachers are the focal point for supporting students with dyslexia and determining accommodations, while the AT(1) emphasized collaboration and coordination.

*Table 9. Arabic department Interviews summary*

1	Inclusive education	Inclusive education in mainstream schools School in study considered inclusive Arabic department considered inclusive
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		1:1 support assistants and IEPs Files sent from SENCO
2	School system and provisions	Sometimes no details given, disagree about diagnosis Classroom interventions and accommodations AT(1) – lack of coordination between classroom and admin
3	Interventions	Guided reading program – not yet implemented
4	Recommendations	Greater family support AT(1) – more coordination and collaboration

#### **4.2.4 Semi-structured interview with Parents**

Parent (1) (P1(1)) participated in the interview by phone call, while Parent (2) (P(2)) responded by closed answers via WhatsApp. Analysis of the parents' responses revealed the following themes and subthemes, further summarized in Table 10:

1. Child with dyslexia profile
2. Awareness of dyslexia
3. School services
4. Individual Educational Plan (IEP)
5. Satisfaction with services provided in both Arabic and English subjects
6. Recommendations and suggestions to improve services

##### **4.2.4.1 Child with dyslexia profile**

S(1) has struggled since Kg1, repeated first grade, and was finally diagnosed in grade 2. Highlighted challenges include memorization, numbers (after grade 1 showed no improvement, limited progress in grade 3 with a support assistant), focusing and concentration, and abstract understanding. He is collaborative, organized and committed, with good handwriting.

S(2) was described as having difficulties since grade 1, but was formally diagnosed in grade 2-3. Highlighted challenges include attention and concentration, distraction and delay in comparison to typical peers, and reading and writing skills. His strengths lie in math.

#### **4.2.4.2 Awareness of dyslexia**

S(1) has a brother with dyslexia, even so P(1) has limited awareness. Whatever she knows is from her own research; a meeting was held with the Arabic department to reinforce the family's role to support Arabic literacy, but the meetings were unprofessional and not beneficial. Collaboration is present through phone calls, meetings, online interface, and in-person feedback; but this has only begun in the current school year.

P(2) communicates with the school through periodic meetings.

#### **4.2.4.3 School services**

Both students were part of a transition year where they were shifted from grade 4 to grade 6; the parents agreed to this move in order for the students to remain with their peers. P(1) is aware of potential problems for S(1) because of the jump in level but believes with the provisions and parental support he will succeed.

Regarding Arabic, both parents feel that a strong basis in L1 is necessary for success in acquiring further languages; however they both recognize a discrepancy in the services provided in Arabic classrooms compared to English classrooms.

#### **4.2.4.4 Individual Educational Plan (IEP)**

When asked about the development of an IEP for their children, and whether they were involved and their opinion of its content and process, the parents have different points of view. P(1) views the IEP as inadequate as it doesn't include math or science, and the evaluation criteria are unclear. P(2) was satisfied with the IEP.

#### **4.2.4.5 Satisfaction with services provided in both L1 and L2 subjects**

S(1) has several supports for English classes, including a 1:1 support assistant, pull-out sessions and an IEP; in math and science classes he only has a 1:1 support assistant; in Arabic classes he has no additional support at school, only at home. Overall



P(1) has noticed clear development in general academic skills, particularly reading and recognition of math symbols.

Regarding the services, P(1) was overall satisfied but felt that the IEP did not include all subjects and its results were not clear; and regarding the classroom teacher, P(1) felt there was poor communication with parents, dependency on the support assistant, and shallow feedback on assessments.

S(2) also has tutoring sessions, a 1:1 support assistant, and participates in clubs and learning trips. Overall P(2) sees clear progress in math.

Regarding the services, P(2)'s opinions were that all are good and effective.

#### **4.2.4.6 Recommendations and suggestions to improve services**

There is a need to strengthen inclusive Arabic classrooms with more effective services, similar to what the English department has established. Furthermore, students with SEN should be encouraged to develop their self-esteem and confidence. Services should develop social skills through authentic activities, giving SEN students responsibilities to boost their self-esteem. P(2) also emphasized the importance of tutoring sessions and additional practice.

*Table 10. Parent Interviews summary*

1	Profile	S(1) diagnosed in 2 <sup>nd</sup> grade; difficulties with memorization, numbers, concentration, abstract; strong in collaboration, organization, handwriting S(2) diagnosed in 2-3 <sup>rd</sup> grade; difficulties in concentration, distraction, academic delay; stronger in math
2	Awareness	P(1) limited awareness, poor communication with school; better program this year but newly implemented P(2) periodic meetings at school
3	Services	Chose to shift students from 4 <sup>th</sup> to 6 <sup>th</sup> grade Strong basis in Arabic important Limited facilities in Arabic as compared to English
4	IEP	P(1) inadequate, doesn't include math or science

5	Satisfaction	P(1) noticed clear overall improvement; dissatisfied with IEP and class. <sup>85</sup> room teacher P(2) noticed improvement in math; satisfied with all services
4	Recommendations	Strengthen Arabic classroom services (should be on par with English services) Develop social skills Continue tutoring sessions/additional practice

### 4.3 Documents

Document analysis is frequently used in research for the collection and analysis of various forms of text as primary sources of research data (O'leary 2004). The document analysis for this study included relevant documents and reports, such as diagnosis reports of S(1) and S(2), official documents issued by the MOE on special education and inclusion policies, and IEPs for both study subjects. After analysis, the documents used in this study have revealed the following themes:

1. Inclusive education policies and regulation in the UAE
2. Identification assessment and recommendations
3. IEPs designed for targeted students

#### 4.3.1 Inclusive education policies and regulation in the UAE

The first theme reveals the development of special education policies and regulations in the UAE since 2010. The MOE launched an initiative promoting inclusive education in 2010, called "School for All." This initiative is aimed at reinforcing Federal Law 29/2006, which stressed that schools should not refuse admission to children with special needs. Along with outlining general rules for special education services, both public and private schools were provided with guidelines, procedures, steps, and considerations regarding how to implement successful inclusion (UAE MOE,

2010)(see Appendix 2). The initiative has been viewed as a positive step towards reform (Florian (1998), Roaf (2002) and Ajodhia-Andrews & Frankel (2010) in Alobeidli).

Further developments have moved toward best practice of education for all in the UAE, based on the UAE's Vision 2021 (UAE MOE 2019). The UAE authority has outlined an educational framework and inspection manual to ensure that standards of high quality of education are being met, a pillar of which is inclusive education. It is based on comprehensive performance standards that define the essential aspects of quality education. Each standard is broken down into specific indicators, and detailed descriptors and illustrations guide inspection judgements and school improvement (see Appendix 3).

#### **4.3.1.1 Ministry of Education strategy for 2017-2021**

The Ministry of Education launched a strategic plan for 2017-2021 to develop an innovative education system in its efforts to build a knowledgeable and globally competitive society (UAE Government 2019b; UAE MOE 2017). The UAE is determined to become an inclusive, barrier-free, rights-based society that promotes, protects, and ensures the success of all groups of students. The impact of inclusion should be seen through the learning experiences of all children, with leaders facilitating and developing inclusive attitudes and practices within their schools.

The ultimate goal is not simply the academic success of all students, but to develop an inclusive environment where the entire school culture recognizes and embraces individual differences, proactively identifying and removing barriers or obstacles to student achievement and participation.

The plan includes an Educational Inspection Manual which tasks the MOE and all stakeholders with developing and implementing standards and tools by which the MOE can inspect and review schools to ensure compliance with its directives. This not

only guarantees the school's participation, but assures the community of its compliance and builds greater awareness of the importance of inclusion in the greater society (UAE MOE 2019). Five key criteria are identified: 1) a special needs teacher; 2) a record of reports from surrounding special education centers; 3) Individual Educational Plans (IEPs); 4) a license stipulating inclusion requirements; and 5) specific equipment and curricula for each SEN student (UAE MOE 2019).

#### **4.3.2 Identification assessment and recommendations**

The psychological report for S(1) and S(2) outline the nature and extent of learning issues, and suggest strategies and classroom accommodations for each student respectively. Their analysis will allow a comparison of the extent of the educational services provided within Arabic and English classrooms with what is suggested in the reports.

##### **4.3.2.1 S(1) psychological report**

S(1) was assessed when he was repeated grade 1, with the evaluation conducted in English. The assessment indicated that S(1) is in the below average range overall, including verbal reasoning and oral language comprehension. S(1) has difficulties in verbal comprehension and in working memory. In attainment tests it was noted that he has significant challenges in reading, spelling and writing (for more details see Appendix 5).

The suggested strategies include:

1. Short tasks with frequent breaks
2. Extra time for all work- literacy and numeracy
3. Individualized Educational Plan (IEP)
4. Support with written work and the use of structured writing frames
5. Practice in comprehension activities
6. Extra time for future examination
7. Shadow teacher and one-on-one support throughout the day
8. Reader for tests

#### **4.3.2.2 S(2) psychological report**

The assessment for S(2) was held when he was in grade 3, conducted verbally in English. Overall, he appears to have significant difficulties pertaining to word reading, written expression, phonetic decoding, spelling and reading fluency. Moreover, in math he experiences calculation difficulty and has trouble applying principles to everyday examples (for more details see Appendix 6).

The suggested strategies include:

1. Therapeutic intervention program
2. Continue in a mainstream school setting
3. Individualized Educational Plan (IEP)
4. Modified individual school curriculum
5. Full- time 1:1 Support Assistant

#### **4.3.3 IEPs designed for targeted students**

The analysis of the IEPs is a cornerstone to evaluate the impact of educational services on S(1) and S(2)'s academic development. The IEPs are revised once a year, with a validity running from October to October. This section presents the IEPs documents designed to support both students from last year (Grade 4) (see Appendix 7) in primary, and the next year IEPs which are designed to cover the transition year (Grade 6) (see Appendix 8) in secondary.

Both students have different IEPs with similar targets in the literacy skills area, while math targets were differentiated. The findings revealed that targets were suitable to grade 1 or 2 within the British Curriculum program. The objectives were specific, measured, achievable, realistic and timely (SMART). Both documents stressed the parents' role in continuing the provision plan at home in reading and comprehension. There were rich aids and resources recommended for literacy, utilizing the MultiLit program (MultiLit 2020). Overall, both students showed improvement in some

academic areas, whereas the report recommended to revise some targets and use different techniques to develop reading, writing and phonics skills (see Appendix 7).

The current IEP for both students is the same for Grade 6, which as a transition year from primary to secondary includes a significant change in academic atmosphere (see Appendix 8). S(1) and S(2) have individual IEPs for English literacy skills and guided reading, as these are the basis for all other skills. The curricula is simplified to some extent, while they are pulled out daily to be taught parallel lessons within general English.

The ALN TA designs her own IEP for both targeted students, reviewing the IEPs each term. The last review determined that both still struggle with reading and writing and their level is below the average of their age group by several years. This review led to a call to change the IEP from a modified curriculum delivered in pull-out sessions to being tutored in one-to-one sessions by the 1:1 support assistant, with the ALN TA monitoring and supporting. The immediate target is to attain the ability to read high frequency words, with the long-term goal of accessing the parallel curriculum.

Overall, the gap was dramatic between the previous IEP for Grade 4 and the Grade 6 parallel curriculum. This shift forced the students to jump to an impossible level in a short period of time; The modified curriculum of Grade 6 was unattainable by S(1) and S(2), therefore the IEP recommended using the MULTILIT intervention program to continue from the previous IEP gradually and logically (see Appendix 8).

#### **4.4 Discussion**

This section includes a discussion of the data analysis, aligned with the research questions.

#### **4.4.1 Effectiveness of educational services and provisions**

*Q1: To what extent are educational provisions effective for learners with dyslexia in subjects taught using English as a dominant language and Arabic as a foreign language in a secondary Northern Emirate private school?*

Overall both students have shown slight improvement in reading, writing, and literacy skills based on the researcher's observation and the 1:1 support assistant's feedback. However, the current rate of improvement is not sufficient to cope with the transition year (from Grade 4 to Grade 6) (see Appendices 8 and 9). According to the ALN TA their reading and writing skills are at a level of Grade 1 or Grade 2, which has led to a dramatic gap between their peers in Grade 6. The school's leadership has struggled to plan for EAL students with dyslexia in the transition year, and should provide students with effective IEPs (see Appendices 11 and 12 for student evaluations by Arabic and English classroom teachers).

The quantity of educational services and provisions to support the targeted students with dyslexia is sufficient in English classes, but the quality to some extent needs more development. The SEND department, which includes all students with dyslexia and any EAL learners at a lower academic level together, plays a vital role, along with the ALN TA and 1:1 support assistants, who together design and monitor IEPs. Classroom teachers have no clear role, and scaffolding that was mentioned by the SENCO in the interview was not apparent during the observation.

S(1) and S(2) were influenced to a limited extent being included in the general classroom. Classroom teachers have collaborated with the ALN TA and 1:1 support assistants through sharing lesson plans and schedules. The inclusive classroom culture seems to be friendly, but in reality, the students have physical integration in the class but not true inclusion. S(1) and S(2) were given similar, unmodified curricula which

was difficult for them in some instances; and in others, they received modified instructions within general setting by the 1:1 support assistant, which limited their interaction within the general classroom environment. Physically, they were integrated while morally, they were isolated. In some instances, the dyslexic students were given a modified curriculum, but an unmodified assessment.

The pull-out sessions, small groups led by the ALN TA and in which the 1:1 support assistant is minimal, seem to be effective. The students interact, participate and work with peers; S(1) and S(2) receive similar instruction and assessment, and have equal access to the resources and assistive tools such as the smart board and computers. However, after the revision and evaluation of the IEP, the team determined that the targeted students were to be removed from the pull-out sessions in order to be tutored by the 1:1 support assistants in one-on-one sessions. This change is a continuation of the previous intervention from grade 4, and shows that skipping a year did not work for the targeted students.

Parents were shown to play a diverse role. There is a financial aspect, as they pay extra fees for 1:1 support assistants. They also have a support role, as they continue the school program and intervention at home. P(1) reported regular communication with the school and monitoring her child's academic progress, but was limited in helping with the English program due to language barriers, as she is EAL. S(1) doesn't receive any educational services or support in Arabic at school, but is supported by his parents who supplement his Arabic learning at home, and he is considered in the average; this is in contrast to his English language level, where he receives no reinforcement at home, and in which he is below the average. The study findings suggest that parental support and continuance of the intervention program at home is ideal for achieving best development of the child and enabling successful inclusion.



In summary, the educational services and provisions are effective in the English classroom, but the jump from fourth to sixth grade did not fit with the study subjects' identified dyslexia. This could have resulted from poor evaluation of the IEP at the end of Grade 4, which determined the eligibility of these students to jump two years ahead.

#### **4.4.2 Recommendations to improve educational services and provisions**

*Q2: What could be recommended to improve the educational services and provisions for SEND learners with Dyslexia?*

Transitioning dyslexic students should follow processes as outlined in the *School for All* initiative. Additionally, IEPs should include science as this course focuses on literacy, vocabulary, reading and writing (similar to language courses) in a science context. A truly inclusive classroom (in English and Arabic) is the goal. The Arabic department should implement training workshops about the SEND policy in the UAE and inclusive education.

Coordination between the SENCO and classroom teachers should be strengthened. Teachers should be monitored, as their role is not removed at the presence of the 1:1 support assistant with a student. The teacher still must monitor, instruct the lessons, and differentiate classroom activities (distinguishing between dyslexic students, EAL students, and those at a lower academic level).

Classroom teachers should be trained regarding accommodations and modifications, including greater awareness of the distinction between the two. Modification during assessment caused a problem for these students; students with dyslexia were only given the accommodation of extra time for the same exam.

Both 1:1 support assistants were effective, however the child should work with different people in order to broaden their knowledge and skills. Additionally, the 1:1 support assistants need to be trained regarding dyslexia, as per the recommendations

from the psychological reports. The benefits of having a bilingual assistant should also be further investigated, with the aim of using Arabic language to simplify complicated tasks. This is in contrast to the interview findings which stressed an English-immersive atmosphere; however it must be noted that in spite of all provisions, these students still struggle and are stuck at basic levels. It was observed that whereas the classroom staff may struggle to aid the student, an Arabic-speaking peer was quickly able to share comprehension.

Pull-out sessions and ALN TA tutoring are excellent, but the school should separate dyslexic students from EAL at a lower academic level who currently are tutored together. EAL is different than dyslexia.

Some parents play a collaborative role, however they are unable to continue the school's provision program at home because of the language barriers. The school should further promote parent's awareness about dyslexia and IEPs and interventions.

School administration should be coordinated among all branches of this school, including Arabic department teachers. They should emphasize the Arabic language, based on the percentage of Emirati students in the school (over 60%). Especially for targeted students, they should have emphasis placed on L1 (Arabic); once this base is established, the second language can be built gradually. Barriers on Arabic language classrooms must be removed to have a dyslexia-friendly school.

#### **4.5 Conclusion**

In this chapter the data collected in the course of the research project was presented and analyzed. After considering the observations and field notes, semi-structured interviews, and documents reviewed, the resulting analysis allowed for a discussion of the research questions and responses. For the sample students, who have been diagnosed with dyslexia and attend a bilingual school, it was found that the

effectiveness of provisions was mixed. There are a number of recommendations for improvement of provisions and services, summarized in Chapter Five which comprises a conclusion of the study and its findings, in addition to limitations and recommendations for further study.

## **Chapter 5 Conclusion and Recommendations**

The conclusion and recommendations of this research have been suggested by the various stakeholders (school staff, administration and teaching staff, as well as parents) and analysis of the presented findings, in conjunction with appropriate recommendations and practices found in the literature. The goal is to improve the quality of services and provisions for included students with dyslexia specifically, and to support the implementation of a successful inclusive education in Northern Emirates within the UAE in general. Effective services and provisions in schools for EAL students with dyslexia is a joint work between the school program and the administration staff, SEND department, class teachers, SEND teacher assistants, and 1:1 SLAs; but also the parents and the greater community. Collaboration between all these individuals is key, achieved through IEPs and other educational services to address challenges faced by targeted students within both English and Arabic Language subjects.

### **5.1 Successful inclusion based on successful implementation**

The implementation of inclusive education includes all subject areas in a mainstream school. A framework for its adoption can be developed in four stages: identifying and adopting a system of inclusive practices; implementing an effective training program; addressing any challenges that arise; and monitoring and revising the framework as needed to ensure best practices (Rodrigues 2016; Mitchel 2014) Each stage requires evidence-based strategies and methods that are carefully planned and based on actual change (Mitchel 2014).

### **5.2 School support and team collaboration**

The findings of this study show poor collaboration between school administration staff at the primary and secondary level, and with the teaching staff in

the Arabic department. The targeted students with dyslexia are negatively impacted by the lack of school support, the poor provisions in Arabic language classrooms, and the inadequate school inclusion system which is applied for English literacy but ignored in Arabic language subject. Time and effort is needed on the part of the administration to provide the necessary support for both teaching staff as well as parents, to include advice and professional help to the general Arabic education teachers as part of successful team collaboration (Montgomery & Mirenda, 2014).

Having effective collaboration in the school is key. The collaborative team should include the school administration, general education teachers of English and Arabic subjects, and special education teachers, along with a variety of educational personnel with the necessary expertise within Arabic as well as English. This team should have a team leader and establish common goals with regular meeting schedules and lesson observations (Mukhopadhyay, 2014). Flexibility is required in order to promote Arabic language subjects with educational services provisions equal to those provided for English language subjects (Schwab et al., 2015).

Additionally, schools should seek professional help from specialists such as speech-language pathologists, behavior specialists and other consulting professionals in order to identify important accommodations and provisions as part of the student's IEP (Montgomery & Mirenda, 2014).

The findings of this study show that teachers struggle with resources and provisions in school to implement inclusion in their classes. Therefore policymakers and legislators of inclusive practices need to take into consideration the attitudes of these teachers and their needs. Governmental support should be comprehensive and include providing appropriate resources, access to specialist staff, backup staff, and training. Failure to provide such support could result in a situation where regular

schools become more restrictive for already vulnerable children, in an Arabic or English context (Monsen et al. 2014).

Schools need to work collaboratively with parents and involve them actively in the learning experience of their children. Parents need to play an effective role within the collaborative team. This includes not only participation in awareness sessions within schools, especially for the parents of students with dyslexia, but also an emphasis on positive attitudes towards their children's education and progress. There is some disparity among parents regarding the importance of inclusive classrooms for children with disabilities, with some preferring separate settings. Parents need more awareness to recognize the social, emotional, and educational advantages of inclusive education that caters to the needs of all children (Abdelhameed, 2015).

### **5.3 Recommendations**

In addition to the recommendations which are based on primary data collection in this study, secondary research yielded other relevant recommendations.

Appropriate provisions are needed for L(1) Arabic language subjects, as it the base for the second language which is English. The findings of this study highlight the poor educational services in the Arabic inclusive classroom, where the targeted students with SPLD struggled with curriculum and assessment. The policymakers and legislators of inclusive practices need to take into consideration the private schools which have international programs where English is considered the First Language, but the majority of students are native Arabic speakers. They need a comprehensive plan for support, including appropriate resources, access to specialist staff, backup staff, and training.

Dyslexia is a language-based disorder that will affect a student's academic performance in most subjects, especially language subjects such as their first language

or a foreign language (Schneider 2009; Miles, 1999). Moreover, dyslexia is not a disorder which can be cured, most dyslexic students work with a special-education teacher in their first language to help them create strategies they can use to succeed in school. Native Arabic students in the UAE with dyslexia face the same difficulties in Arabic subjects as in English, according to the research reports and interviews with parents and teachers. Failure to provide such support for Arabic language subjects could result in a situation where mainstream schools become more restrictive for already vulnerable children (Elshazly 2019).

In addition, there is a need for an appropriate, official school policy regarding inclusive education, more flexible curricula, and sufficient teacher education at the university level, all of which require the support of policymakers and legislators (Schwab et al., 2015).

The findings also show that teachers consider the curriculum as one of the factors affecting their attitudes, therefore it is important that teachers are aware that students with disabilities require significantly different teaching strategies in regular classes, including curriculum adaptations and lesson modifications. Offering more flexible curricula that can be adapted to students' different needs is very important to academic success for all students in the classroom (Mitchell 2014).

#### **5.4 Limitations in methodology**

There were several limitations to this study, mainly to do with access. As the study involved children and clinical information, stakeholders were often reluctant – and at times even refused – to give information. Finding a school willing to participate and gaining their permission took a long time. It was likewise difficult to obtain official documentation from the school as to their agenda, inclusion license and accreditation from the MOE, the criteria and scales used for student assessment, students' artefacts

such as assessments and the IEPs, and conditional letters. It was impossible to address specific lesson plans from teachers to evaluate the differentiation techniques used to teach targeted students with general classroom. Moreover, several target participants were reluctant, some agreeing to respond only through e-mail/online.

There were also limitations in access to students, as the researcher was not able to conduct student interviews and had limited opportunity to observe students in parallel situations across Arabic and English subjects.

## **5.5 Future recommendations**

Future research could be broadened to include more subjects, female and male, in addition to studies in public as well as private schools. The researcher could be integrated with students in all situations, thereby completing more comprehensive, active research.

Additionally, new initiatives could be implemented and then assessed for validity and effectiveness. For example, the possibility of a bilingual 1:1 support assistant was introduced in this study, with the goal of strengthening L1 as a base and therefore L2. A pilot study could be done using the adoption of a bilingual assistant as a research subject. Proactive leadership is essential to provide suitable educational services to support students with dyslexia in bilingual schools, and to create a dyslexia-friendly environment where students with dyslexia are truly included in general classroom.

This study also recommends further research beyond the UAE, extending within the Gulf Cooperation Council (GCC) region, where there are many students with dyslexia who are left behind and need special educational services to support their academic learning, particularly in a bilingual context (Arabic and English literacy).



In conclusion, this study was designed to examine the effectiveness of educational provisions provided by an international, private, bilingual, inclusive secondary school in the Northern Emirates of the UAE, in support of native Arabic students with dyslexia. Data were gathered through observations and field notes, semi-structured interviews and documents analysis, which showed that the school is providing a number of educational services for students with dyslexia which seem to be effective for English literacy skills; however there is a lack of support provided for Arabic literacy classes. Limited improvement might also be related to a lack of coordination between teaching staff, administration and parents, in addition to an unclear vision of inclusive education. It is the personal goal of the researcher that this study will help other researchers and decision makers in the UAE and greater GCC to improve inclusive education for students with dyslexia within bilingual international schools.

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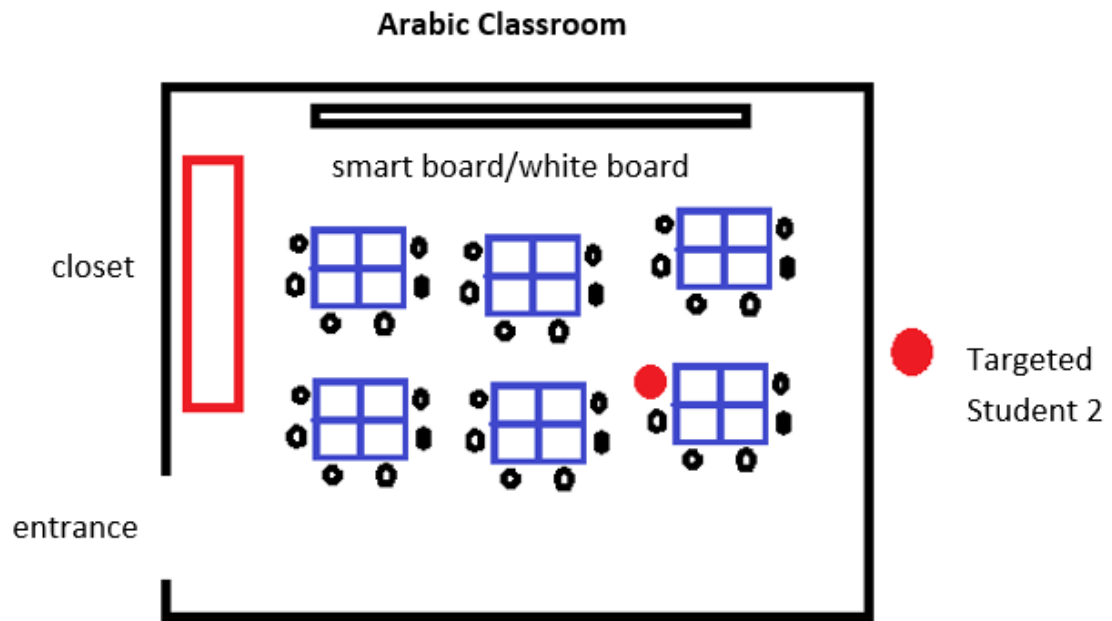


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## Appendix 1 Classroom Map Student 2



## Appendix 2 School for All Initiative

# School for All theme ( MOE 2010)



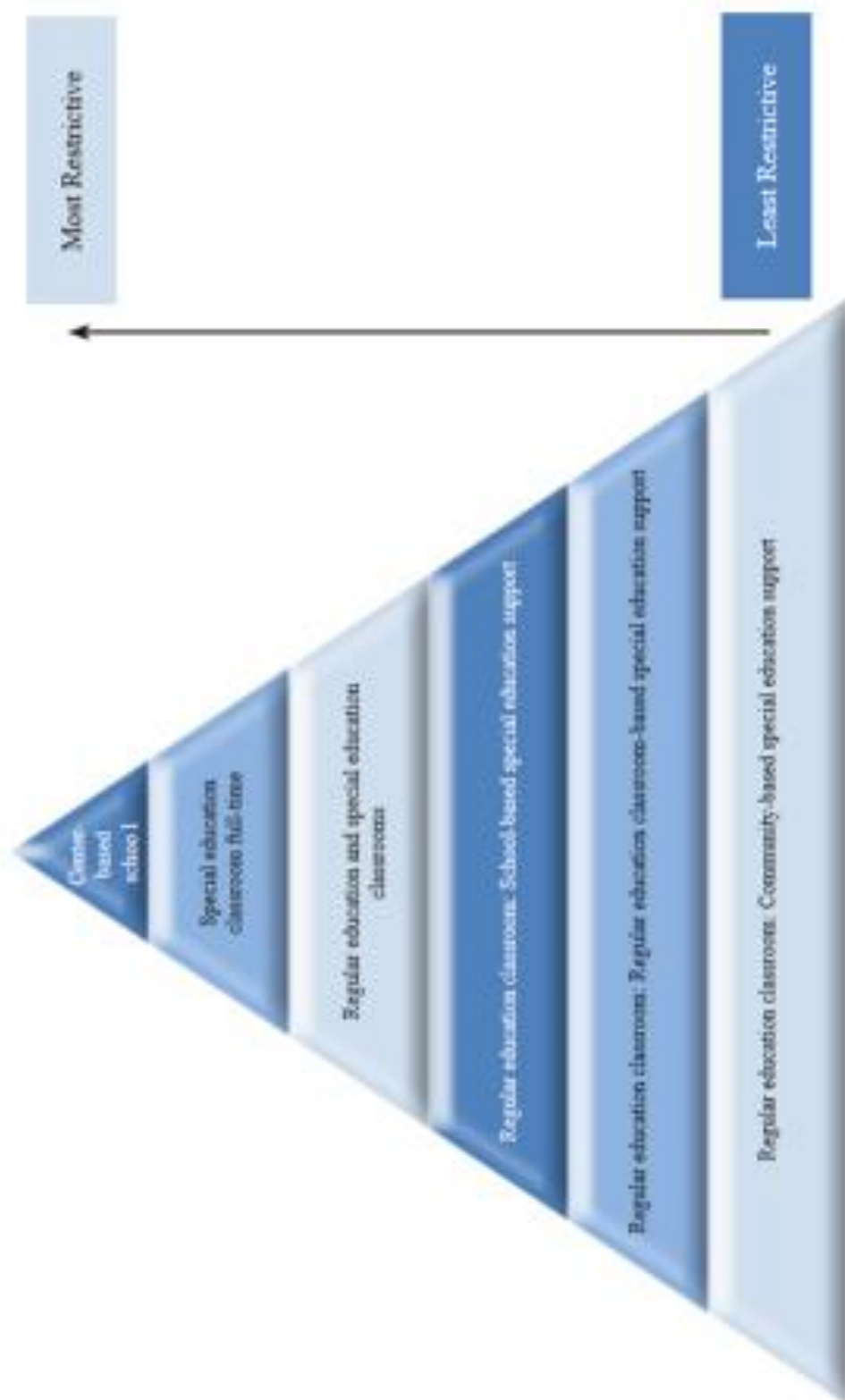
# Mainstream schools( private schools)

## Goals for Ministry of Education, Special Education Department

- (1) Provide equal opportunities for education to students with disabilities in the public and private schools and comply with the provisions of Law No. 25/2006 related to the Rights of People with Special Needs in the field of education.
- (2) Provide appropriate services to the students with disabilities and special gifts and talents in all educational institutions in the public and private schools that meet their needs and enhance their abilities.
- (3) Provide appropriate assessment tools to determine eligibility for the various categories of disabilities and develop individual educational plans and provide all services in accordance with the best international practices.
- (4) Provide appropriate learning environment (least restricted) based on an Individual Educational Plan, enhance and enrich learning opportunities through the Advanced Learning Plan, so as to meet all the needs of the students with special needs and gifts and talents in public and private schools.
- (5) Provide ongoing professional development on the contemporary and best internationally recognized practices in the field of special education to the professionals working with students with special needs and gifts and talents.
- (6) Collaborate with qualified professionals for all categories of special education to educate and meet the needs of students with special needs and gifts and talents.

- (7) Collaborate with parents or students with special needs and gifts and talents at every step of the educational process starting from the assessment phase to developing an Individual Education Plan and monitoring the progress of the student.
- (8) Cooperate and collaborate with other establishments and institutions that provide services to the families of individuals with special needs such as the Ministry of Social Affairs and the Ministry of Health.
- (9) Educate the community about the rights and needs of persons with special needs in the field of education and promote inclusive education through workshops, conferences, informal events planned by the Ministry of Education and educational districts, schools and community institutions. Provide students without disabilities an opportunity develop an understanding of the needs of students with disabilities, provide appropriate assistance to them, and challenge their views about the limitations of students with special needs.
- (10) Provide a quality learning environment to meet the needs of as many students with special needs in public and private schools as possible.

Figure 2. Hierarchy for Inclusive Education Learning Environments.



### **Special Education Programs:**

#### **Inclusion in Regular Education Classroom with Community-Based Support**

Students with special needs may be enrolled in a regular education classroom and receive special education support service from community providers.

#### **Inclusion in Regular Education Classroom with Classroom-Based Support**

Students with special needs may be enrolled in a regular education classroom and receive special education support services in the classroom from the general and or special education teachers or from specialists. For example, a student with a speech and language disability may receive speech therapy services from the speech and language therapist in the regular education classroom.

#### **Inclusion in Regular Education Classroom with Resource Room Support**

A resource room is a classroom located in the regular education school where students with special needs, or the Gifted and Talented may attend to receive individual or group instruction and support in not more than half of his academic subjects as indicated in his Individual Education Plan (IEP), or Advanced Learning Plan (ALP).



## Procedures for Identification of Disabilities

When a student who is not enrolled in any special education program experiences learning or behavior difficulties, or has sensory, medical or physical needs, the student may be referred by a parent, school personnel or community organization for a comprehensive evaluation to determine his eligibility for special education programs and services. The following 6 steps should be followed to determine the student's eligibility for special education programs and services and are illustrated in Figure 3 and a flowchart in Figure 4.

Figure 3. Procedures for Identification and Eligibility Determination



### Pre Referral Services:

- Student Support Team

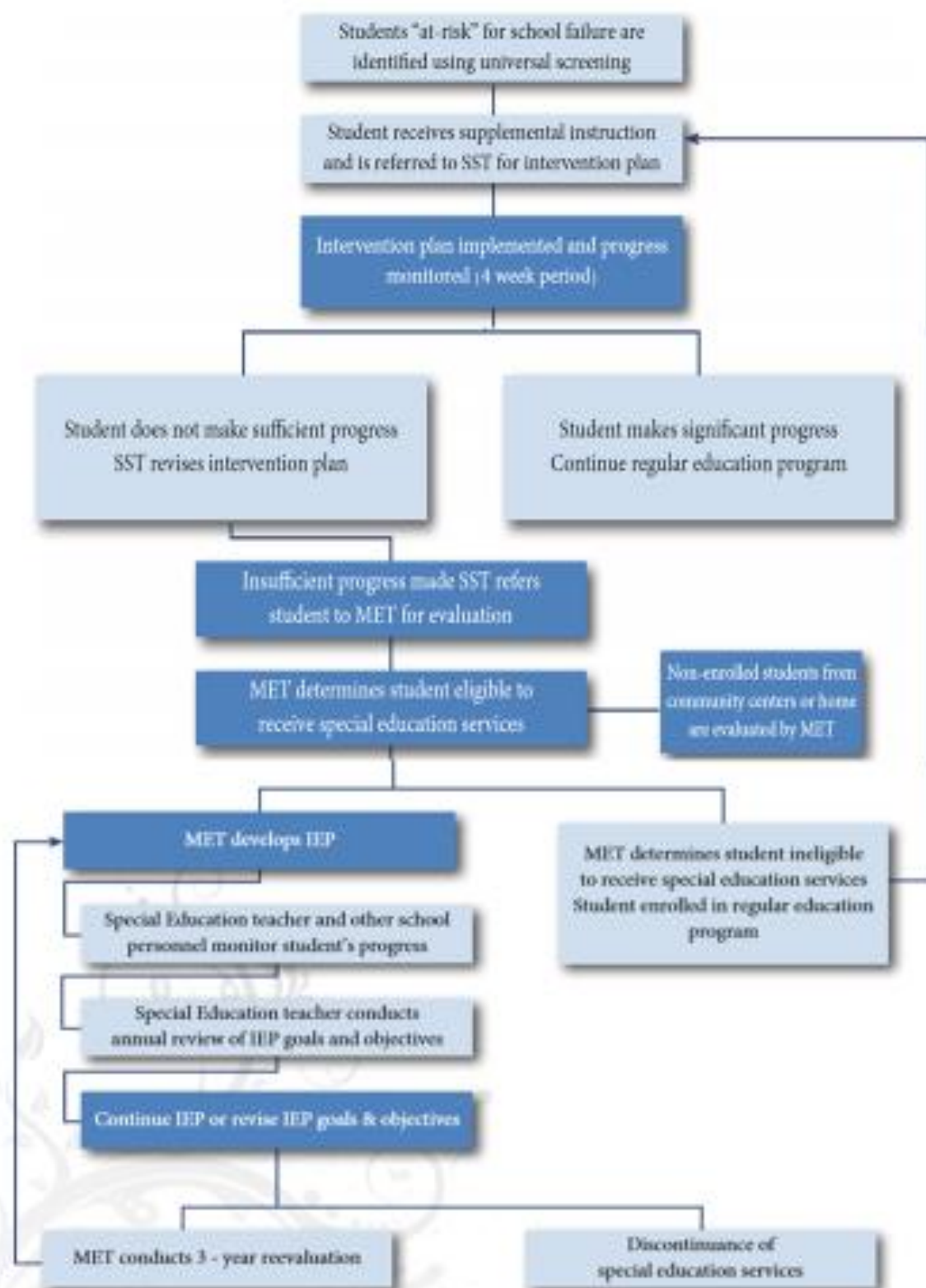
### Special Education Programs :

- Regular Education Classrooms Programs
- Special Education Classrooms Programs
- Community Based Special Education programs

### Other Related Support Services:

- Speech and language services
- Physical Therapy
- Occupational Therapy
- Vocational Training
- Other support services according to the needs of student

Figure 4. Flowchart for the Special Education Process



## 2.1 UAE National Agenda

"Education is a fundamental element for the development of a nation and the best investment in its youth." UAE Vision 2021

In 2014, H.H. Sheikh Mohammed Bin Rashid Al Maktoum, Vice President and Prime Minister of the UAE and Ruler of Dubai, launched the UAE National Agenda as an extension to achieve the UAE Vision 2021 in time for the UAE golden jubilee celebration. The UAE National Agenda covers the sectors of education, health, economy, police, housing, infrastructure and government services. Education is a particularly important focus of the UAE National Agenda as it includes eight objectives that should lead the UAE to being among the most successful countries in providing world-class education. These objectives target important areas in education related to students, teachers and school leaders.



By working towards these objectives, school leaders will take actions to make their

## 2.3 Inclusion

The concept and practice of inclusive education have gained importance in recent years. Internationally, the term is increasingly understood more broadly as a reform that supports and welcomes diversity amongst all learners. Inclusive education is not a marginal issue but is central to the achievement of high-quality education for all learners and the development of more inclusive societies. Inclusive education is essential to achieve social equity and is a constituent element of lifelong learning. UNESCO

Inclusive education is the process through which schools develop systems, structures, programmes and activities so that all students are able to learn, develop and participate together. In an inclusive school, the curriculum, physical surroundings and school community should reflect the views and characteristics of its students. An inclusive school honours diversity and respects all individuals.

The UAE is determined to become an inclusive, barrier free, rights based society that provides, protects, and ensures the success of all groups of students. The impact of inclusion should be seen through the learning experiences of all children within UAE schools.

Governors and senior leaders have a responsibility to facilitate and develop inclusive attitudes and practices within their schools. In the most successful schools, a highly inclusive ethos will be reflected in the values and culture of the entire school community so that learners feel welcome, accepted, safe and valued.

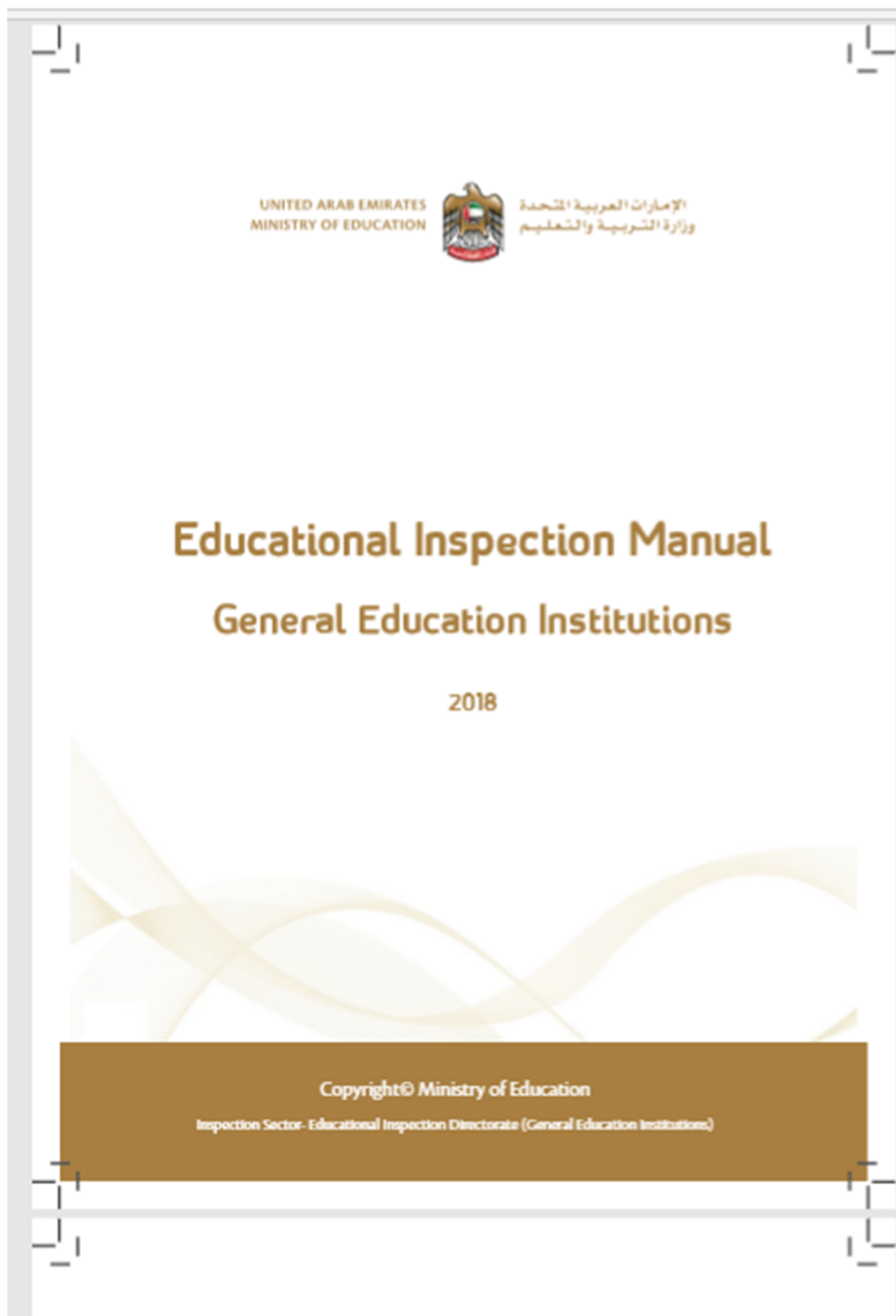
Inclusion does not mean building people the same without regard for individual differences. The inclusive school will be proactive in identifying barriers which restrict students' achievement, participation and learning, and will take action to remove obstacles which lead to educational exclusion.

Particular groups of students who require access to specialised provision within our schools are at the highest risk of experiencing educational exclusion. These include students with special educational needs, students with disabilities, students with special talents and students with special gifts. Aspects of provision which require special consideration to ensure the educational inclusion of these groups of students include the:

- effectiveness of identification procedures
- appropriateness of curriculum modification systems
- impact of specific intervention or personal support mechanisms
- use of feedback from monitoring and assessment processes.

Developing inclusion will involve students, professionals, parents, carers and the wider community. Provision made by schools for students with special educational needs is now integrated into the framework. Schools and inspectors will be able to evaluate the quality of provision for these students in the process of considering selected performance standards and indicators.

## Appendix 3 UAE Ministry of Education School Inspection Framework



## Second : General Inspection of Private Schools

Four basic standards were identified for the visit to the general inspection on private schools. A range of domains and elements were identified under these standards as shown in the following table:

Table (2): General Inspection of private Schools

Standard ID	Standard	Domain ID	Domain	Element ID	Element
				6.01.01	Raising the flag according to UAE guidelines
				6.01.02	Official photographs are displayed in accordance with UAE guidelines
				6.01.03	A sign-board is clearly visible at the entrance of the school that clearly shows the school name in Arabic and

Standard ID	Standard	Domain ID	Domain	Element ID	Element
	The Educational and Academic Services.	8.06	The Special Education	8.06.01	A special needs teacher (people of determination) is available where required
				8.06.02	The school has a record of all reports from the surrounding special education support centers
				8.06.03	Individual educational plans are available for the special education
				8.06.04	The school has a license that stipulates the requirements needed to integrate people of determination (SEN) in mainstream classes
				8.06.05	The school provides specific equipment and curriculum for each special needs child

## Appendix 4 Consent Letter for School Principal and Parents

School For All

### MASTER OF INCLUSIVE EDUCATION PROGRAM

#### The Dissertation Title :

**The provisions of educational services for native Arabic learners with dyslexia  
in a private primary school- Northern Emirates: A case study**

This dissertation is prepared for academic purposes for British University in Dubai "BLUD". It is a case study report based on observing native Arabic SEND learners diagnosed with dyslexia in a regular classroom setting in both Language subjects (Arabic & English). It aims to compare the Dyslexia challenges and symptoms in both language subjects that ESL pupils faced and to determine the effective provisions in both language subjects to meet pupils' needs to fulfil their academic target. This is a dissertation that polemics services not for publishing. It's done by ( the researcher name) who enrolled in the British University in Dubai in 2019. The weight of this assignment is 16,000 words.

The case study is regarding the scientific research ethical considerations and preventing it from being published definitely. The confidentiality of participants and setting are priority. The identities and privacy of school, participants and pupil will be unknown for Ethical considerations within the scientific research. Moreover, the participant have the right to refuse to sign this consent form or to withdraw from the study whenever need. This case study will need the following: the information and documents as the diagnostic report, medical record and pupil artifacts. All of these materials will be not allowed to be used in social media. For any information you can contact the researcher by mobile No. (.....) with Email: .....@gmail.com

#### **Consent**

I, undersigned \_\_\_\_\_, consent that you can use the information gathered for the case study entitled : « [The provision of educational services for native Arabic learners with dyslexia in private primary school- Northern Emirates: A case study] » all the other identified requirements that I have signed in the consent form will be applied exactly like they were described, especially those who relate to the confidentiality and protection of my personal information.

\_\_\_\_\_  
Signature of Principle

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of parent or legal guardian

\_\_\_\_\_  
Date

#### **Declaration of the person responsible to obtain the consent**

I, \_\_\_\_\_, certify that I have explained this form to the participant and answered any and all questions that she/he asked on the matter and have clearly identified that she/he can revoke their consent and withdraw, at any time, their participation to this study as described above. Thus, I will ensure that the objectives of this study will be pursued and the confidentiality respected.

Signature : \_\_\_\_\_ Signed in \_\_\_\_\_, the \_\_\_\_\_ 2018



## رسالة الماجستير في التعلم التأمجي

العنوان : " الخدمات التعليمية المقدمة لدعم الطلبة الناطقين باللغة العربية الأم الذين لديهم صعوبات تعلم أو هياضي بصر القراءة في مدرسة خاصة للغة الإنجليزية في الإمارات الشمالية - دراسة حالة

هذا الأطروحة معدة لأغراض أكاديمية تتضمن الجلسة البريطانية في دبي. هذا البحث يتطلب التركيز على عدد من الطلبة الذين يعانون من عسر القراءة أو صعوبات التعلم في المرحلة الابتدائية الذين لديهم احتياجات خاصة في بيئة دراسية من خلال الملاحظة المباشرة وجمع المعلومات وإجراء المقابلات مع الطلبة ( إن كان ضرر - ومنح) وولي أمر الطالب ومعلمي اللغة العربية والإنجليزية ومسؤول قسم الدعم في المدرسة . الهدف من هذا التقرير هو مقارنة التحديات والصعوبات التي يعاني منها الطلبة في كلا اللغتين اللغة الأم (العربية) واللغة الثانية ( الإنجليزية) وملاحظة مدى ملائمة الخدمات التعليمية المقدمة في كلا اللغتين من حيث المنهج المحتل والاستراتيجيات والنشاط الخاصة التي تم تصميمها بهدف تحقيق أفضل الأهداف المنصوص عليها في الخطة القومية التعليمية وعلى أساس معالجة الخدمات التعليمية المقدمة المقدم مفهوم البحث بإقتراحات لتطوير المنهج والخطة المطبقين.

هذا التقرير معد لأغراض أكاديمية خاصة بالجامعة البريطانية في دبي والتي تقدم باثوثيات وأبحاثات البحث العلمي ، حيث تمتع بشر المعلومات الخاصة بتمام والتي من أولوياتها المحافظة على سرية المعلومات المتعلقة بالمشاركين وبالمجأة كالمؤسسات التعليمية وغيرها وكذلك المشاركين الحق في إلغاء المشاركة في أي وقت. هذا التقرير يحتاج الإطلاع على مجموعة من المعلومات الخاصة بالبحث: كالتقارير التشخيصية والطبية والأكاديمية و أعمال الطالب وإنجازاته الأكاديمية. ويرجى العلم بعدم السماح بنشر هذه المعلومات في وسائل التواصل الاجتماعي مثلًا ولا في غيرها. يرجى عدم إيراد أي التواصل مع البحث في أي وقت كان من أجل الاستفسار والتزود بالمعلومات عن طريق الهاتف النقال (.....) أو البريد الإلكتروني(.....).

### الموافقة

أنا الموقع أدناه .....أوافق على السماح باستخدام المعلومات المذكورة أعلاه بغرض " تقرير عن دراسة حالة الطفل من استجاباتهم في بيئة تعليمية عامة دراسية " مع مراعاة الغرضية السرية الخاصة بالمشاركين والمؤسسات.

توقيع المدير

التاريخ

توقيع ولي الأمر

التاريخ

### تصريح الباحث المسؤولة عن إجراء البحث

أنا المدعو ..... أشهد بأنني وضعت في هذا التوراج المشاركين الهدف من البحث وإجراءاته وفهمت كل المعلومات المتعلقة بطرق المشاركين حيث يحق للمشاركين الانسحاب في أي وقت كما هو موضح أعلاه. وضمن بقاء معلوماتهم سرية والإحتفاظ بغرضياتهم . أقر بالحدود والتزامي بالاحترام الأمانة العلمية .

وقع في يوم الثلاثاء تاريخ 17 سبتمبر من عام 2019

## Appendix 5 Psychological Report Student 1

2

### Main Tests Used

1. Wechsler Intelligence Scale for Children (WISC IV)
2. Wechsler Individual Achievement Test (WIAT-II and III)
3. Gray Oral Reading Test (GORT- 5)
4. Comprehensive Test of Phonological Awareness (CTOPP)
5. Test of Orthographic Competence (TOC)
6. Test of Early Reading Ability (TERA-3)

### Background

██████ is a quiet and polite boy who tried very hard with all the tasks during the assessment. He is however experiencing significant challenges in class particularly with reading and writing. He is currently in Grade 1 (which he has repeated) and it is important that supports continue to be in place when he moves to Grade 2.

The purpose of this assessment is to ascertain the nature and extent of ██████ learning issues and to suggest some strategies and classroom accommodations to help him progress in attainments.

His parents were both present and a feedback meeting was held after the assessment with the help of a translator. His parents indicated that he is quite different at home and shows good understanding of activities outside of school.

The assessment was held at ██████ in Dubai. A full range of tests were used consisting of cognitive, (reasoning and processing), and attainments (reading, spelling and maths). A summary of assessment results is shown below.

### Summary of Assessment Results

The assessment indicated that ██████ is in the low average range for full scale IQ using the General Ability Index (GAI). The GAI discounts the working memory and processing speed scores. His working memory was particularly low and this skewed the overall scores. Using the GAI therefore is appropriate and gives a better indication of his ability level. His GAI was in the 10<sup>th</sup> percentile in the low average range.

- His Verbal Comprehension came out in the low/below average range in the 6<sup>th</sup> percentile and this is one of his most significant issues. This in fact is preventing him from progressing as often he had difficulty in understanding the question.

His Perceptual Reasoning, which is visual reasoning, was in the 12<sup>th</sup> percentile. His reasoning skills are in the low side and this means that instructions will need to be repeated to ensure he has full understood the task.

His processing speed came out close to the average range, but his working memory was in the very low range in the 1<sup>st</sup> percentile.

In the attainments it was noted that his reading accuracy was below the 1<sup>st</sup> percentile and he was unable to read any words in the single word reading test. It was not possible therefore to administer the Gray Oral Reading Test (GORT-5) and the Test of Early Reading Ability (TERA-3) was used instead.

In the TERA-3 [redacted] scored in the low average range (9<sup>th</sup> percentile) in the Alphabet Scales and in the very low range in the 1<sup>st</sup> percentile in the meaning index.

The Early Reading Scales were also used in the WIAT-II and he scored in the 2<sup>nd</sup> percentile in this sub test.

[redacted] spelling (written expression) is in the very low range in the 1<sup>st</sup> percentile and he is very vulnerable in his written work although his handwriting is very neat and legible. His letter formation is good but he needs a great deal of time for written work. He made a good attempt at coping the words in sentences in the written expression sub-test but was not able to do this accurately. He persisted with this task and his handwriting is very neat.

[redacted] receptive vocabulary was in the very low range in the 1<sup>st</sup> percentile and this is a vulnerable area for him. His expressive vocabulary was in the below average range and while this is higher it is still very low. These sub-tests used picture cues.

His practical Maths was also in the very low range and his oral Maths Problem Solving was in the below average range.

[redacted] has significant challenges in literacy and numeracy and he is presenting with general learning difficulties that are having an impact across the curriculum.

[redacted] phonics and word attack skills were also in the low side and he will need a shadow teacher to support him support with reading, spelling and writing and also with language comprehension.

The key points of the cognitive assessment are shown below and full discussions and tables of results are shown later in the report.

### Key Points of the assessment - Cognitive

- [redacted] scored in the low average range overall in the WISC-IV using the General Ability Index<sup>1</sup>. This index discounts the processing scores.
- He has significant challenges in working memory.
- He scored in the below average in language comprehension.
- He had difficulties in receptive vocabulary as well as expressive vocabulary and he may well benefit from a programme developed by a Speech and Language Therapist.
- He scored in the low average range in the Perceptual Reasoning Index in the 12<sup>th</sup> percentile. This index relates to visual reasoning and he performed extremely well in the block design sub test, which relates to visual spatial ability. In this sub-test he scored in the average range.
- [redacted] scored in the very low range in working memory<sup>2</sup> in the 1<sup>st</sup> percentile – he had particular difficulty in understanding the instructions to this test although they were explained to him the maximum number of times. He does have difficulties in processing information using working memory.
- Overall the scores in the cognitive assessment are very weak in terms of reasoning and processing. It is encouraging that his processing speed came out close to the average range but his other scores were all very low. He did have a difficulty with task understanding and he will need instructions to be clear and likely to be repeated. The full scores are reported below.

### Wechsler Intelligence Scale for Children (WISC 1V)

Indices	Composite Score (mean=100)	Percentile Rank	95% confidence interval	Qualitative description
Verbal Comprehension	77	6	72-85	Below Average
Perceptual Reasoning	82	12	76-91	Low Average
Working Memory	65	1	60-75	Very Low
Processing Speed	88	71	80-98	Low Average

<sup>1</sup> The General Ability Index (GAI) is an aggregate of reasoning scores - Verbal Comprehension and Perceptual Reasoning. It

<sup>2</sup> Working memory involves holding two or more pieces of information at any one time and simultaneously undertaking a processing activity.

General Ability Index (GAI)	80	10	75-90	Low Average
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#### Discussion of Indices:

##### Verbal Comprehension Index

In the verbal comprehension scales [redacted] scored in the low average range in the similarities (language concepts) subtest and in the below average range in comprehension.

##### Perceptual Reasoning Scale

The perceptual reasoning scale relates to visual processing. In this scale [redacted] scored in the low average range. His practical visual/spatial skills however came out at a good level and he performed well in the block design sub-test. This is a visual spatial test and can have a relationship with spatial orientation.

##### Working Memory

[redacted] scored in the very low range overall in working memory. Working memory is short-term memory that involves processing two or more pieces of information at the same time.

The sub-tests involve digits forward, reversed and a more complex test of sequential auditory working memory – the 'letter /number sequencing' sub-test. It can be noted that he scored in the very low range in the letter/number sub test, which involves sequencing skills as well as working memory. He had difficulty in fully comprehending this purpose of this task.

↓ what does he need At classroom?  
In the classroom situation tasks involving the use of working memory can be challenging. He will for example need instructions one at a time and he will need instructions repeated to ensure that the instruction has been consolidated in memory.

##### Processing Speed

[redacted] scored close to the average range in the processing speed index. These sub-tests involved copying information and [redacted] is able to do this quite well. He does have a difficulty in generating written information. [redacted] will require more time for writing activities and for processing information. The sub- tests scores of the WISC-IV are shown below.

#### Wechsler Intelligence Scale for Children (WISC IV) - Sub-tests Results \*

Verbal comprehension		Perceptual Reasoning		Working memory		Processing speed	
Similarities	7	Block design	9	Digit span	5	Coding	9

Vocabulary	6	Picture concepts	6	Letter/number sequencing	3	Symbol search	7
Comprehension	5	Matrix reasoning	6				

\*average 8-12, range 1-19

### Educational Attainments

In order to ascertain [REDACTED] overall level of achievement a number of tests were used. The WIAT-II and III offer a comprehensive overview of a range of areas in literacy, comprehension and Maths. A number of additional measures were used to ascertain the nature of [REDACTED] difficulties in addition to the WIAT-III, particularly the GORT-5 (reading accuracy, reading rate and reading comprehension) and the Comprehensive Test of Phonological Processing (CTOPP). Sub-tests on expressive writing and handwriting were also used.

### Results - Reading

The results indicated that [REDACTED] scored in the very low range in single word reading. He was unable to read any words but was able to read most of the letters correctly. He had a difficulty with sounds and rhymes. It is encouraging in the Test of Early Reading Ability that his alphabet skills came out in the low average range. This is essentially a visual test and this helped [REDACTED] a great deal.

### Spelling and Writing

[REDACTED] performed in the very low range in spelling. His handwriting is at a good level but he has difficulty with written expression. He made a good attempt at copying sentences but was not able to generate any phrases himself in the written expression sub-test.

### Numeracy

[REDACTED] scored in the very low range in the practical numeracy task. He scored in the below average range in the oral Maths problem solving sub-test. He will need more time for Maths in view of his language and processing difficulties.

### Receptive and Expressive Vocabulary

[REDACTED] scored in the very low range in receptive vocabulary and in the below average range for expressive vocabulary. He will need instructions to be repeated in view of his challenges with receptive vocabulary, but it is very encouraging that his expressive vocabulary is at a

## Test of Early Reading Ability (TERA-3)

Subtest	Percentile rank	Standard score	Qualitative Description
Alphabet skills	9	80	Low Average
Meaning	1	70	Below Average

Concluding Comments

↓ conclusion ↓

A summary is provided at the beginning of this report. but briefly the assessment indicates that [redacted] is in the below average range overall in the WISC-IV overall and his verbal reasoning and his oral language comprehension are in the below average range. [redacted] has difficulties in verbal comprehension and in working memory.

In the attainment tests it was noted that his reading, spelling and writing are all very challenging for him. He has significant language comprehension difficulties and will need a shadow teacher as well as some support from a reading specialist or speech therapist.

Areas of Priority for [redacted]

The main areas of concern are the following:

1. Focussing – he will benefit from short tasks and frequent breaks between the tasks.
2. Processing Speed – he will need extra time for all work - literacy and numeracy.
3. Development of strategies for working and long-term memory. → visual - u stories - h games -
4. Strategies for reading and spelling Multilit
5. Support with written work and the use of structured writing frames. → ALN (TA) persuas writing
6. Practice in comprehension activities.
7. He will need extra time for future examinations.
8. He will need a shadow teacher and one on one support throughout the day.
9. He will need a reader for tests. → where is it al Arable?  
→ general Reading test (SAT but sometimes 1:1 read.

Suggestions for Intervention

The following areas of concern need to be taken into account in the development and implementation of a program of work for [redacted]



Some other suggestions include:

- avoid too much environmental distraction,
- keep instructions to a minimum - one at a time, → Arabic - None
- provide re-assurance on tasks,
- split tasks into shorter tasks with frequent breaks, → = - =
- ensure the task can be completed,
- scaffold work to help with comprehension → ALN - TA ✓
- discuss the task with him to ensure he has a full understanding. → Needs L1 support

## 2. Reading

### Phonological awareness/ phonic skills

This is currently a weaker area for [REDACTED] and this should be prioritised in order that he develops efficient decoding skills. The main areas to target are:

- Rhyming —
- The use of alliteration —
- Blending and segmenting syllables —
- Developing recognition in initial phonemes —
- Linking sounds to symbols —
- Onset and Rime —

A multisensory approach is excellent for this and involves the following factors: sequential, cumulative and over learning. This, and other similar approaches, will be beneficial for [REDACTED]

### Phonemic analysis and word attack skills

This involves breaking words down into constituent sounds and blending the sounds and syllables to make words. The following may help:

- exercises to help him recognize alliterations, sound patterns and rhyme in words, —
- exercises identifying syllables in words,
- practice at identifying initial and final sounds in words,
- practice at blending longer words. → ALN (TA)

There are a considerable number of games and 'fun type' activities available that can help to vary the learning experiences when tackling decoding text. For example:

- games where he has to find picture cards beginning or ending with specific sounds,



- \* or where he has to think of the most words ending in that particular letter sound,
- \* homophone games can improve spelling through recognition of key words,
- \* vowel discrimination games to develop auditory awareness and improve word attack skills and word games and activities that can develop memory, sequencing, free writing and an awareness of rhyme.

#### Onset/ rime

■■■■■ experiences difficulties in tasks involving onset/rime.

This involves the prefix and the rest of the word and dividing words into syllables. Activities for this are helpful as they will develop and extend decoding skills. It will be useful to develop this using concrete materials and word games.

#### Sight word reading

■■■■■ will need practice in developing automaticity in sight words. This means he will need to break down words into constituent sounds in order to read them. He has a difficulty in this area at the moment and this is restricting his progress in reading. As he advance in reading he will need to accumulate sight words and in order to do this he will need maximum exposure to whole words. ■■■■■ will therefore also need top down approaches to reading to obtain this. An example of this is the paired reading approach as he will be able to hear the word and see it simultaneously. ■■■■■ will therefore need both phonics approaches to reading as well as whole language approaches.

#### Reading practice and comprehension

This is very important for ■■■■■ as he progresses through school. He will benefit from reading practice but it needs to be accompanied with comprehension activities. The 'hi-lo' readers that are characterised by the high interest and low vocabulary level of the book can be ideal as they can help with fluency and comprehension.

These books can help to develop reading comprehension and processing speed. There are a number of stockists of these types of books, for example 'Writing World' which has suggestions for reading and writing - <http://www.writing-world.com/foster/foster03.shtml>.

Barrington Stoke ([www.barringtonstoke.com](http://www.barringtonstoke.com)) have a number of these type of books.

Some suggestions for this can be seen in the web site for cross-curricular literacy

<http://www.edu.gov.on.ca/eng/studentsuccess/thinkliteracy/files/reading.pdf>

The National Literacy Trust Schools Guide 2014-2015 is a helpful document for developing literacy.

*Recommendations*

[http://www.literacytrust.org.uk/our\\_network/guide](http://www.literacytrust.org.uk/our_network/guide)

### 3. Writing

This is a priority area for [redacted] and this is currently in the below average range. He will benefit from writing frames to develop his expressive writing skills.

#### Writing Vocabulary

The creation of a personal word bank can also be useful. It is a good idea to have the meaning of the word next to the word to ensure that the word is used appropriately.

You may find the video discussion on children's writing featuring Louisa Moat's helpful -

<http://www.readingrockets.org/webcasts/3001/?trans=yes>

#### Pre-Writing Activities

The procedures for this useful guide in structuring written work can be seen at

<http://www.teachingenglish.org.uk/article/approaches-process-writing>

#### Pre-writing Activities

1. Creativity - thinking about how to approach a writing topic. In this stage, the most important thing is the flow of ideas
2. Focusing ideas - during this stage, students write without much attention to the accuracy of their work or the organisation. The most important feature is meaning. Here, the teacher (or other students) should concentrate on the content of the writing.
  - Is it coherent?
  - Is there anything missing?
  - Anything extra?
3. Evaluating, structuring and editing - now the writing is adapted to a readership. Students should focus more on form and on producing a finished piece of work. The teacher can help with error correction and give organisational advice.

#### Pre-writing suggestions

Brainstorming - quickly produce words and ideas about the writing.

Planning: make a plan of the writing before starting writing.

These plans can be compared and discussed in groups before writing takes place.

- Generating ideas - discovery tasks such as cubing (students write quickly about the subject in six different ways - they:

1. describe it

2. compare it
3. associate it
4. analyze it
5. apply it
6. argue for or against it.

### 5. Spelling

The following may be helpful for [REDACTED]

- The use of key words and visuals that can be used to reinforce spelling rules and concepts.
- The use of mnemonics to help with recall of non-phonetic words. There are a number of useful computer programmes that can also be helpful with spelling making it a fun activity. The company [www.spellingmadesimple.com](http://www.spellingmadesimple.com) have a good range of software for spelling.
- The School Zone spelling 2 pack also has a range of fun activities in spelling ([www.schoolzone.com](http://www.schoolzone.com))

### Spelling - Look, Cover, Write, Check

This is an established strategy for spelling.

**Look** – this involves active engagement of the writer looking closely at the word with the intention of reproducing it. Tracing at the 'look' stage, which will utilise the kinesthetic memory, can result in a stronger memory trace and enhance the chances of the student remembering the visual features of the word. It is also important that the look stage is not skipped or rushed through before the student has had an opportunity to develop visual strategies to help memorise the visual features. Such strategies can include making visual analogies of the word and recognising the visual features and similarities of the letters and the word to other words or acknowledging the distinctive features. For example in the word 'window' there are a number of visual aspects which could help with memory such as the first and last letter being the same and the distinctiveness of the letter 'w'. At this stage it is also possible to draw attention to words within words such as the word 'tent' in 'attention' and 'ask' in 'basket'.

**Cover** – this involves the visual memory –this takes practice and some children can adapt to this better than others. This type of activity lends itself very well to a game and this can be

motivating for learners. Visual memory can of course be practiced with a range of visual games and games and activities involving visual discrimination. For example Crossbow educational produce a wide range of games such as 'Rummyword', 'Breakdown' and 'Funfish' all of which can help provide practice in visual activities which can have a spin-off for spelling. Additionally mnemonics as well as game-type activities can be used as an aid for visual memory.

**Write** – this is an important stage as it provides the kinesthetic practice needed to strengthen the memory trace.

**Check** – this provides the learner with some responsibility for his own spelling. It is important to reduce the dependency on the teacher as soon as possible and to promote the activity of self-correction.

#### **Simultaneous Oral Spelling:**

The steps for this include:

- Have the word written correctly, or made with the letters.

Say the word.

- Write the word, spelling out each letter as it is written, using cursive script.
- The child needs to –see each letter–hear its name –receive kinesthetic feedback through the movement of the arm and throat muscles.
- Check to see if the word is correct.
- Cover up the word and repeat the process. Continue to practice the word in this way, three times a day, for one week. By this time the word should be committed to memory. However, only one word will have been learned.

This final step involves the categorisation of the word with other words, which sound and look alike. So if the word that has been learned is 'round' the student is then shown that he can also spell 'ground' 'pound' 'found' 'mound' 'sound' 'around' 'bound' 'grounded' 'pounding' etc. That is six, eight, or more words have been learnt for the effort of one.

#### **7. Learning Strategies -Discussion**

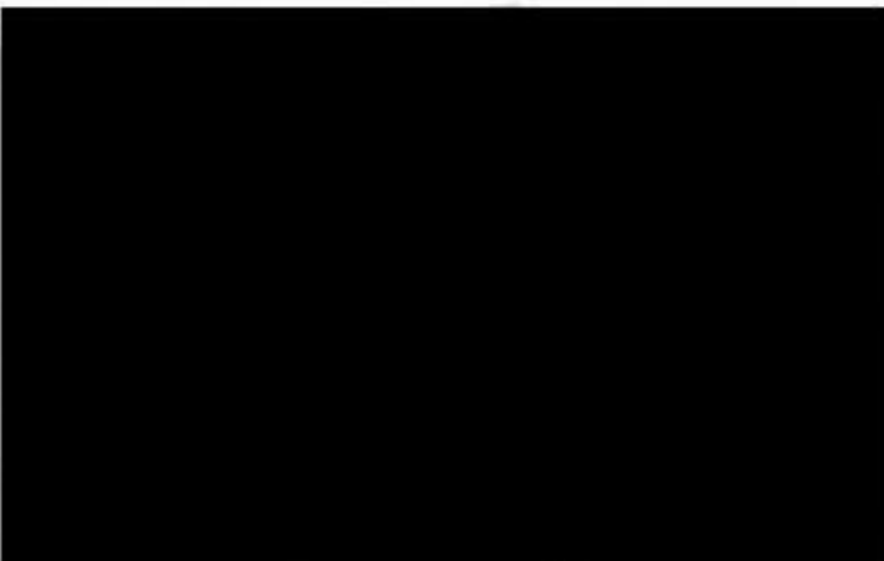
will benefit from discussion of the text before he attempts to read. This will help his develop a schema of the text, which will help to extend his language concepts and comprehension.

**Organisation and generation of ideas**

may find programs such as inspiration™ very helpful. This is a software programme that can help in the development of ideas and to organise thinking. Through the use of diagrams it helps the learner comprehend concepts and information. Essentially the use of diagrams can help to make creating and modifying ideas easier. It is also possible using this program to prioritise and rearrange ideas, helping with writing and with organisation <http://www.inspiration.com/>

There are many some encouraging aspects in profile and he has the cognitive potential to perform at a good level. He will need support when he moves to Grade 2 as his current attainments are still in the very low side. He will therefore need a great deal of individual support.

I hope you find this report helpful. Please feel free to contact me on any future occasion.



The programme known as TextHelp® is particularly useful for assisting with essay writing. Text help has a read back facility and has a spellchecker that includes a dyslexic spell check option that searches for common dyslexic errors. Additionally TextHelp® has a word prediction feature that can predict a word from the context of the sentence giving up to ten options from a drop down menu. Often dyslexic students have a word finding difficulty and this feature can therefore be very useful. This software also has a 'word wizard' that provides the user with a definition of any word; options regarding homophones; an outline of a phonic map and a talking help file.

### Kid/Inspiration

Inspiration is a software programme that can help in the development of ideas and to organise thinking. Through the use of diagrams it helps the student comprehend concepts and information. Essentially the use of diagrams can help to make creating and modifying concept maps and ideas easier. The user can also prioritise and rearrange ideas, helping with essay writing. Inspiration can therefore be used for brainstorming, organising, prewriting, concept mapping, planning and outlining. There are 35 in built templates and these can be used for a range of subjects including English, History and Science. The Inspiration programme converts this image into a linear outline.

**IANSYST Ltd** – provide computers and technology for helping people of all ages at college, school, work or home. Provide products such as texthelp, Dragon Naturally Speaking, Inspiration and software on learning skills such as reading, spelling, grammar, comprehension and memory. Web sites - [www.iansyst.co.uk](http://www.iansyst.co.uk) and [www.dyslexic.com](http://www.dyslexic.com).

**Crick Software** [www.cricksoft.com](http://www.cricksoft.com) Popular clicker programmes can be used for sentence building, word banks, writing frames and multimedia. Lively presentations eg series on Find out and write about includes programmes on explorers, castles and animals. Also provide Clicker books and Clicker animations.

This International web site comments on spellcheckers, electronic books, different kinds of calculators, wordshark and clicker4 (talking word processor), Kurzweil 3000 (scans and reads books), WordQ (writing tool that uses advanced word prediction), Text help, Co:Writer (provides vocabulary, spelling, composition and revision that supports that builds skills in writing), Write Outloud (talking word processor – very suitable for grades 3-12 ), PenFriend, (supportive writing software featuring word prediction (predictive typing), on-screen keyboards, screen-reader speech feedback), Dragon 'Naturally Speaking,

Further information from 

## **Appendix 6 Psychological Report Student 2**

### **The Psychological Assessment Summary**

#### **Done for (Student 2)**

##### **REASONS FOR REFERRAL**

A referral request was made when the child was almost 9 years old, in 2017, due to concerns at school. The school regarding Academic abilities. Difficulties were reported in relation to in reading and written expression and mathematics skills. As well as the difficulties that he had to access the academic curriculum. It was noted that he faced difficulties in sentence composition, as well as phonics and pronunciation. It was reported that significant difficulties in relation to personal, academic and school community skills.

In relation to socialization skills, he reported with significant difficulties included comprehending emotions in others. Engaging with classmates and using words to express feelings. In relation to motor skills, he reported age appropriate gross motor skills, with mild difficulties with fine motor skills such as tying knot and cutting complex shapes.

The school SEN coordinator further reported that when the child began at this school, he initially experienced regular dribbling from his mouth. He was described as completely non-verbal in school and avoidant in engaging or interacting with children and adults at the time. In relation to academic skills, he experienced difficulties in retaining academic information that he learnt, in contrast to non-academic (understanding was more apparent outside the classroom, in school or at home). Moreover, the child's mother reported that S(2) met the normal motor and speech milestones throughout his early development, however a significant bowel



problem appeared when he was 6 years old which subjected him to a restricted diet.

#### **TEST ADMINISTEREDW**

- ❖ Wechsler Intelligence Scale for Children -4<sup>th</sup> Edition (WISC-IV)
- ❖ Wechsler Nonverbal Scale of Ability (WNV)
- ❖ Behavior Rating Inventory of Executive Function (BRIEF)
- ❖ Wechsler Individual Achievement Test- 3th Edition (WIAT- III)
- ❖ Vineland Adaptive Behavior Scale-2<sup>nd</sup> Edition (VINELAND-II)
- ❖ Behavior Assessment System for Children -2<sup>nd</sup> Edition (BASC-2)

#### **TEST RESULTS AND INTERPRETATION**

The assessment was delivered in English, and evaluated S (2) cognitive, executive, and achievement functioning.

#### **Wechsler Intelligence Scale for Children -4<sup>th</sup> Edition (WISC-IV)**

##### **COGNITIVE FUNCTIONING**

The WISC-IV is a measure of intellectual functioning that provided a profile of a child's strengths and difficulties. It is a verbally presented assessment, delivered in English. Percentile ranks give an indication of how the child compares to other children of the same chronological age. The Full-Scale IQ represents a measure of overall global intelligence. S (2) achieved score of 71, which ranked at the 3<sup>rd</sup> percentile with classification of borderline. That means that he scored higher than 3% of other children in his age.

The **Verbal Comprehension Index (VCI)** measures knowledge acquired from a child's environment, as well as verbal concept formation and verbal reasoning. It examined how the child forms the ideas



and concepts. S(2) scored lower on Vocabulary and Comprehension which suggesting significantly below age appropriate knowledge and principles. The large discrepancy in subtest scores removed the ability to provide a representative VCI for S (2).

The **Perceptual Reasoning Index (PRI)** is measure of a child non-verbal fluid reasoning, spatial processing and visual perception. It considers the ability to examine a problem, draw upon visual motor and visual spatial skills, organize thoughts, create solutions, and subsequently test. S (2) achieved scaled of 5 for **Matrix Reasoning** suggesting that S (2) Below Average skills and difficulties for him in the area of fluid reasoning. This refers to his capacity to solve new problems in novel situations not encountered previously. Moreover, he scored within the Below Average for block Design (SS:7) suggesting below age appropriate abilities in spatial reasoning. However, he performed within the Average range within Picture Concepts (SS:10), which reflected his highest score on the WISC and suggested relative strengths in task examining non-verbal categorical reasoning skills.

He is obtained a **WNV Full Scale** IQ of 73, which ranked in the 4<sup>th</sup> percentile with classification of Borderline. This suggests that his intelligence level is below the level expected for his age when not relying on verbal communication, similar to his skills identified within WISC. This suggests that S (2) performance was not significantly impaired by language deficit.

The **Working Memory Index (WMI)** is a measurement of visual and visual -spatial working memory, representing the S (2) ability to hold information in mind, concentrate and manipulate information to produce an end result whilst resisting interference. It involves attention, concentration, mental control and reasoning and is

important in higher order thinking, learning and achievement. He achieved a WMI of 80. Which ranks at the 9<sup>th</sup> percentile with a classification of Low Average of Low Average, reflecting an area of difficulty for this child. He achieved a scale score of 6 for Digit-Span, this suggesting below age appropriate abilities regarding mental manipulation and sequencing. He also scored within the Below Average range for Letter-Number sequencing (SS:7), suggesting difficulties in tasks involving a higher cognitive load.

The **Processing Speed Index (PSI)** measures the ability to focus attention and discriminate between order visual information quickly scan. It requires a level of planning ability and persistence, but can sensitive to motivation, motor co-ordination and time pressure. He performed in the Below Average range with Coding (SS:7), suggesting below age appropriate skills in visual scanning within time constraints. He also experienced difficulties within symbols research (SS:6) which is a complex task that involves discriminating between target items to determine if matched exist.

His perceptual reasoning skills were an area of his strengths. Overall, it was identified that S (2) has individual strengths pertaining to perceptual reasoning, particularly tasks examining non-verbal categorical reasoning skills.

His overall perceptual reasoning skills were below the level expected for his chronological age. He also, experienced difficulties pertaining to working memory and processing speed, his greatest area of difficulty related to verbal comprehension, particularly tasks examining the child's knowledge and use of words in English, as well as his ability to discuss his knowledge and intellectual concepts verbally.

## **Behavior Rating Inventory of Executive Function (BRIEF)**

### **EXECUTIVE FUNCTIONING**

The testing center used the Behavior Rating Inventory of Executive Functioning (BRIEF) measurement tool, which assesses the child's everyday behavior with specific features of self-regulated problem solving and social functioning.

Overall, this child was noted to experience significant difficulties within the metacognition domain, such as planning, organizing and self-monitoring are likely to be required to a much greater degree within school setting compared to home setting, which would indicate difficulties for him compared to his peers.

## **Wechsler Individual Achievement Test- 3th Edition (WIAT- III)**

### **ACHIEVEMENT FUNCTIONING**

The Wechsler Individual Achievement Test, 3<sup>rd</sup> edition (WIAT III) was used to examine S (2) 's academic skills, including oral language, reading, written expression and math.

The targeted child's **Oral Language skills** were found to be within the low range overall. Suggesting significant difficulties understanding and presenting his ideas verbally for academic purposes and his understanding of verbal information and ideas presented by others appears to be greater area of difficulty than his ability to express himself verbally within school.

Within the **Listening Comprehension Index**, he performed mildly below-appropriate age levels on the Oral Discourse Comprehension, suggesting mild difficulties understanding large bodies of information presented verbally by others. Overall the findings suggests that the targeted child S (2) is likely to experience comprehending verbal information provided by others in academic setting, particularly complex words in English.

Within **Oral Expression Index**, the result suggesting that he performs significantly below the level expected in chronological age in relation to expressing himself verbally in English. Although pertaining to his ability to attend to repeat verbally presented sentence. However, he demonstrated strengths in Oral Word Fluency, which suggests that his word retrieval skills are age-appropriate.

The targeted child's overall **Reading skills** are an area of significant difficulty for him, which require immediate and long-term support. The results suggesting that he experiences significant difficulties in reading common words where he required to apply phonetic decoding rules to words. Although his ability to comprehend various texts including fictional stories information texts and how to read passages was in the below average range. In Oral Reading Fluency, he scored in very low range, suggesting that his reading fluency skills are an area of significant weakness for him.

The targeted child's overall **Written Expression** assessment revealing significant difficulties in ability to compose sentences. Overall written expression skills are below age-appropriate levels.

The targeted child's **Mathematics skills** suggesting difficulties in Numerical Operations, Math Problem Solving and Math Fluency. As well, that he experienced difficulties performing math calculations and applying such principles to everyday examples.

Overall, He appears to have significant difficulties pertaining to word reading, written expression, phonetic decoding, spelling and reading fluency. Moreover, in math he experiences calculation difficulty and has trouble applying principles to everyday examples. this included difficulties pertaining to reading to word reading, phonetic decoding, and reading fluency.

## **RECOMMENDATIONS**

1. **The difficulties identified suggest that a therapeutic intervention program should be implemented for S (2). This should be consisting of the following:**
2. Speech and Language Therapy: Given S (2) difficulties pertaining to verbal comprehension and oral language, he would benefit from attending a Speech and Language Therapy. This assessment should be completed by a Speech and Language Therapist who is fluent in both English and Arabic, with the function of establishing a baseline indication of his speech and language skills in both languages. This will determine whether he should attend Speech and Language Therapy sessions in the future.
3. He would be benefit from additional Tuition for his reading. Written Expression and Mathematics. This can be conducted by individual tutoring, either at school or within home setting. Those work with this child, should focus on improving his basic blending skills, reading fluency and reading comprehension. Within Written Expression, he should be support to develop his skills in writing short words and to learning basic sentence composition skills. In relation to Mathematics, S (2) will require support to improve his geometry and calculus skills, as well as his math fluency.
4. Student (2) would be benefit from English Language tuition to improve his English comprehension and expression skills. This appears to be a significant difficulty compared to his peers, and given a nature of his academic environment, should be improve in order to facilitate his development.
5. This child would be benefit from attending a Social Skills Group to encourage further development of skills with a small group of peers. A social Skills Group is typically facilitated

1. by Clinical Psychologists and encourages small groups of similarly aged.

**2. Overall school program:** it's recommended that the targeted child continuous to access to mainstream school setting, working accordingly to an Individualized Education Plan (IEP). An IEP addresses a child's unique profile and includes specific goals tailored to their strengths and difficulties. The targeted child's IEP should be guided by the results of this assessment and designed to appropriate modify his individual school curriculum. This should include academic difficulties, as well as additional support that could be put in a place to build these skills. This child's learning style, as highlighted by this assessment, should be addressed within the teaching setting. It is important that each teacher is aware of the targeted child's unique profile of strengths and difficulties.

**The targeted child's IEP should include:**

- a) A statement of child's present level of performance
- b) The child's annual education goals
- c) Modifications and Accommodations school will provide to support the targeted child's progress
- d) Special education supports and services that school provide to support the child with achieving the goals
- e) How and When school measure the child's progress towards annual goals
- f) Accommodations during tests

**3. This child will require modifications during the test-taking in the future**

- a) He should be allowed approximately 25% additional time when completing tests or timed tasks.

- a) Where possible he should take tests in the morning, toward the beginning of the school's day
- b) He may benefit from sitting test in a separate room from his peers
- c) Assistive technology may be provided to support him during test-taking.

**2. It's essential to have access a full- time Learning Support Assistant or shadow teacher to work with him one-one.**

**The LSA should be trained in working with children with cognitive and academic difficulties. The role of the LSA should include:**

- a) Ensure that targeted child has the support to participate in individual and group activities relevant to academic curriculum.
- b) Provide support and help
- c) Assist teachers in generating and applying any curriculum modifications/adaptations that are deemed necessary for this child
- d) Promote appropriate social interaction and communication skills with adults and children.
- e) Ensure that he follows generalized group instruction, demonstrate on-task behavior and work toward independent task completion, while accessing the age-appropriate curriculum

Overall, it is recommended to given difficulties indicated a therapeutic intervention program should be implemented. It was recommended as well that S (2) continue to access a mainstream school setting, working according to an Individualized Educational Plan (IEP) that addresses his unique learning profile and includes

specific goals tailored to his strengths and difficulties. Saad's IEP should be guided by his results and designed to appropriately modify his individual school curriculum, which should include consideration of modifications Saad may require based on his verbal comprehension and academic difficulties as well as additional support to build these skills. Furthermore, he needs a full-time Learning Support Assistant or shadow teacher who should be trained in working with children with cognitive and academic difficulties.



## Appendix 7 Individualized Educational Plan Grade 4

<p><b>Strengths:</b> [redacted] tries to give his very best in all the activities that are presented to him.</p>	<p><b>Areas to be developed:</b> Language, literacy and basic skills in mathematics along with concentration.</p>	<p><b>Additional Learning Needs (ALN) Provision:</b> 4 days a week (1 period 50 minutes) 3 days a week - Maths (1 period 50 minutes)</p>	<p style="text-align: center;"><b>Student (1) Grade 4 2018-2019</b></p>	
<p><b>Target 1: Speaking/Listening/Reading</b></p> <ul style="list-style-type: none"> <li>To be able to tell/ retell stories in logical and/or sequential order.</li> </ul>	<p><b>Strategy/Resources:</b></p> <ul style="list-style-type: none"> <li>Reading books</li> <li>Reinforced reading daily</li> <li>Comprehension and writing activities</li> <li>Self-correction</li> <li>Coloured Overlay</li> </ul>	<p><b>Review Date:</b> [redacted] 2018</p> <p><b>Target Achieved?</b> Partially/ Competent</p>		
<p><b>Target 2: Writing</b></p> <ul style="list-style-type: none"> <li>To begin sentences with openers.</li> <li>To use punctuation properly.</li> <li>To use range of connectives to create more complex sentences.</li> </ul>	<p><b>Strategy/Resources:</b></p> <ul style="list-style-type: none"> <li>Big writing games</li> <li>VCOP Working wall and word bank</li> <li>Verbalize sentences</li> <li>Model and Shared Writing</li> <li>Picture clues</li> <li>Jumbled sentences</li> </ul>	<p><b>Review Date:</b> [redacted] 2018</p> <p><b>Target Achieved?</b> Partially/ Competent</p>		
<p><b>Target 3: Maths</b></p> <ul style="list-style-type: none"> <li>Develop strategies for memorizing addition and subtraction number facts</li> <li>To develop recall of the 2,3,10 and 5 times table.</li> </ul>	<p><b>Strategy/Resources:</b></p> <ul style="list-style-type: none"> <li>1 – 100 chart</li> <li>Whiteboard</li> <li>Maths Manipulatives</li> <li>Math games</li> <li>Collaborative session</li> </ul>	<p><b>Review Date:</b> [redacted] 2018</p> <p><b>Target Achieved?</b> Partially/ Competent</p>		
<p><b>Suggestions for Parental Support:</b> Read daily at home with parent support and be encouraged to retell the story after reading. Play interactive games and do Raz-kids daily. <a href="http://www.familylearning.org.uk/phonicsgames">www.familylearning.org.uk/phonicsgames</a> <a href="http://www.kidsspell.com">www.kidsspell.com</a>, <a href="https://www.raz-plus.com/">https://www.raz-plus.com/</a>, <a href="https://www.teachyourmonstertoread.com/">https://www.teachyourmonstertoread.com/</a></p>				
<p><b>Parent Signature:</b></p>	<p><b>Teacher Signature:</b></p>	<p><b>Student Signature:</b></p>		

Name: [REDACTED]	Student Number: [REDACTED]	Year Group: [REDACTED] month	Class: 40
ALN Provision: 1:1 sessions with the shadow teacher 5 days a week.			
<b>Strengths:</b> <ul style="list-style-type: none"> <li>Motor Skills</li> <li>[REDACTED] is well behaved during 1:1 session and he tries his best to do the given activities for him.</li> </ul>	<b>Area to be developed:</b> <ul style="list-style-type: none"> <li>a) Self-confidence in reading and writing ability</li> <li>b) Oral language-listening</li> <li>c) Basic problem solving and mathematical skills</li> </ul>	<b>Date Set:</b> [REDACTED] 2017  <b>Review Date:</b>	<h1 style="text-align: center;">Student (2) Grade 4 2018-2019</h1>
<b>Target 1:</b> <ul style="list-style-type: none"> <li>To be able to read and write Multilit sight words in different contexts.</li> <li>To develop sight word vocabulary and phonemic awareness.</li> <li>To develop word attack skills to enable him to decode unfamiliar words with accuracy.</li> </ul>	<b>Strategy:</b> <ul style="list-style-type: none"> <li>a) Multilit sight words and words attack 1:1 program</li> <li>b) Flash Cards, picture cues</li> <li>c) Jumbled letters</li> </ul>	<b>Date Set:</b> [REDACTED] 2017  <b>Review Date:</b>	
<b>Target 2:</b> <ul style="list-style-type: none"> <li>To be able to read simple stories and answer comprehension question related to the story.</li> <li>Practice addition, subtraction and multiplication facts to 20.</li> <li>Develop confidence in expressing his ideas</li> </ul>	<b>Strategy:</b> <ul style="list-style-type: none"> <li>a) Daily reading at appropriate level.</li> <li>b) Comprehension and creative writing activities</li> <li>c) Big writing game</li> <li>d) Acting out a story/retell</li> </ul>	<b>Date Set:</b> [REDACTED] 2017  <b>Review Date:</b>	
<b>Suggestions for Parental Support:</b> Read daily at home with parent support and be encouraged to retell the story after reading. Practice MULTILIT words every day at home. Play interactive games and do Reading aids daily. <a href="http://www.raz-kids.com">www.raz-kids.com</a> <a href="http://education.com/games/reading/first-grade/">http://education.com/games/reading/first-grade/</a>			
Parent Signature: [REDACTED]	ALN Staff signature: [REDACTED]	Student: [REDACTED]	

# Final Report ( IEP evaluation) Y 4 (2018-2019)

IEP Target Progress	Summary of Overall ALN Progress over this Academic Year	Recommendations for Next Academic Year
<p><b>Target 1:</b> To use range of strategies when decoding familiar words.</p> <p>_____ has is able to read and write Multitilt sight words up to List 1.1 and has been working on word attack skills up to 4.2.</p> <p><b>Target 2:</b> To develop recall of the 2, 3, 4 and 5 timetable.</p> <p>_____ has made some progress with this target using a range of resources to support his learning.</p> <p><b>Next Steps:</b></p> <ul style="list-style-type: none"> <li>To continue the MULTITILT sight words and word attack program at 1:1 session.</li> <li>To continue with IDL online program and daily reading.</li> <li>To be able to write sentences using simple connectives.</li> <li>To spell CVC words accurately.</li> </ul>	<p>_____ is a very good communicator and a risk-taker. He has worked to the best of his ability during 1:1 sessions and in the classroom this year.</p> <p>_____ has shown great interest in reading and writing the MULTITILT sight words and word attack skills. He enjoys the 1:1 sessions and has worked hard on the online IDL reading program. He really feels proud and happy when he gets the spellings right and also makes good attempts to correct his mistakes.</p> <p>_____ has gained confidence while interacting with his friends and tries hard to express his ideas in the group or classroom.</p> <p>_____ has also shown great improvement with his maths work and he can do some of it independently.</p>	<ul style="list-style-type: none"> <li>1:1 LSA support.</li> <li>To continue to develop phonic skills.</li> <li>To be able to review and edit his work independently.</li> <li>To be able to write with great range of language features.</li> <li>To create number bonds of 1 – 100.</li> <li>Daily reading at home and in school.</li> <li>To continue with IDL online programme.</li> </ul>

Report of the IEPs designed for the targeted students in grade

## Appendix 8 Individualized Educational Plan Grade 6

2019-2020 Y6 transition – Term 1 IEP for both students

Name	ID	Grade Class	Term: 1
Strengths .. Both students are well behaved and curious students. They enjoy reading sessions and participate actively during the discussions about Book's text. Both students have had a very good start this year.	Area to be developed		ALN provisions: 4 times a week Suggestions and recommendations for parents' support Encourage students to work daily at home by Listening, reading and completing the quizzes of at least one book at Raz-Kid; ask them about what they understanding or learned from the book read
<b>Target 1</b> Reading- Determined the main idea of the current leveled reading book of the ( PM level G) and cite 2-3 supporting details	<ul style="list-style-type: none"> <li>Strategy</li> <li>Identify the topic</li> <li>Look at the first and last sentence of the reading book.</li> <li>Look for reception of ideas</li> <li>Visuals</li> <li>Look for facts and evidence that supports the main ideas</li> </ul>	Date set: Review date: Target achieved Achieved working towards	
<b>Target 2</b> Writing- Recognize and use the regular verbs in the past tense by writing 5 long sentences weekly	<ul style="list-style-type: none"> <li>Strategy</li> <li>Visuals</li> <li>Translation to the first language</li> <li>Verbs match</li> <li>Recount past events</li> <li>Circle verbs in reading texts</li> <li>Expanding sentences</li> </ul>	Date set: Review date: Target achieved Achieved working towards	
<p>The researcher's Notes, based on the updated feedback from Support team at the end of 2<sup>nd</sup> Term</p> <p>This IEP is not the original document from school, but it is the summary for ethic considerations.</p> <p>The Support team department commented on this IEP which designed for both targeted students (1 &amp; 2) because they have similar challenges (dyslexia).</p> <ul style="list-style-type: none"> <li>Both students still struggled in reading and writing the basic vocabulary as High Frequency Words (200), so they are unable to cope with parallel lessons of grade 6, in contrast the other peers who are EAL with low academic level, who have had distinctive progressing.</li> <li>In term 2, Both students (1 &amp; 2) will be tutored in 1:1 SLA and with TA, in one-one sessions ( not in group of EAL) .</li> <li>Both SLAs and TA working are working with theses students utilize MultLit intervention, on the first 100 High Frequency Words.</li> <li>repeating and memorizing these words to be read and spelled accurately, in aim to access the parallel lessons in the future.</li> </ul>			

## Appendix 9 Observations and Field Notes Student 1

Research Title: The provision of effective -educational services for native Arabic learners with dyslexia in private primary school- Northern Emirates: A case study																			
1/ To what extent educational services provision is effective in secondary school in Northern Emirates to support the SEND learners with Dyslexia in both subjects English and Arabic?		2/ What could be recommended to improve the educational services needed for native Arabic, SEND learners who study English as a second Language?																	
Focus on: Codes <ul style="list-style-type: none"><li>• Educational Provision</li><li>• IEP</li><li>• Accommodation/ modification</li><li>• Teaching strategies</li><li>• SPLDs challenges</li><li>• L1 Arabic</li><li>• L2 English</li></ul>	Thematic Analysis [CODEs] <ul style="list-style-type: none"><li>• Student (1) attendance</li><li>• D &amp; T designing is inclusive classroom</li><li>• Participants [Classroom teacher, (TA1), (TA2), Mom]</li><li>• Friendly conversation with (ALN TA) takes 25 minutes</li><li>• The processes of providing the child with SEN process</li><li>• IEP</li><li>• Pull-out session</li><li>• English and Math</li><li>• ALN (TA 2) role (follow up and guided the teacher and within her club)</li><li>• ALN (TA 2) collaboration between classroom and TA2 is a service that support the SEN student.</li></ul>																		
Grade 6 Case pseudonym : (Student 1) Day 1 : Sunday Time in : 7:40 am Time Out: 09:35 am	Setting: Private school ( general classroom at back & at ALN room) Participant: he is late, then his mom texted me by WhatsApp that he is sick and will be absent  Subject <table><tr><td>D&amp;T</td><td>8:00</td></tr><tr><td>Mat</td><td>8:40</td></tr><tr><td>Guided reading</td><td>9:20</td></tr><tr><td>Break time</td><td>10:00</td></tr><tr><td>Islamic</td><td>10:20</td></tr><tr><td>Literacy</td><td>11:00</td></tr><tr><td>Arabic</td><td>11: 20</td></tr><tr><td>PE</td><td>1:00</td></tr></table>	D&T	8:00	Mat	8:40	Guided reading	9:20	Break time	10:00	Islamic	10:20	Literacy	11:00	Arabic	11: 20	PE	1:00		
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Descriptive Field Notes		Reflective Field Notes / development																	
I crossed the reception to get the visitor card and to sign in the attendance book. I met the principal and he greeted me. [redacted] wasn't there in her office but [redacted] ( not important details)  I met [redacted] son [redacted]. He was so happy to see me in his school. I felt that I have some to feel confident and proud. I entered grade 6 floor. I saw [redacted] who refresh negative memory about her monitoring and her friend. ( not important details)  I attended (student (1)) classroom. His classroom teacher welcomed me. It was written on the B.B "Welcome Ms. Hana. Then, he introduced me to the whole classroom. Classroom teacher (T1) that Student (S1) missing first session in majority. The shadow teacher (TA1) was absent too. I told teacher that I will leave if the child is absent cause that no reason to stay and disturbing teacher. Students left the classroom after lining up. I felt shy to ask teacher that where they are going for? He came and told me they are in D & T) designing classes where Student (S 1) missed the D & T designing session. I kept myself busy until Student (S1) attendance, but his absence confirmed by Mom. I decided to write my journal and fill the field notes. Some questions were bouncing in my mind; however, I was planning the way of directing		Note! The (TA1) major is business, while her experience of tutoring (S1) for 5 years.  Inquiry! <ul style="list-style-type: none"><li>• Lots of questions and ideas bouncing in my mind</li><li>• Teacher plays a critical role in making inclusive classroom effective for children with SN by using techniques / intervention but teacher should aware of the case with SN.</li><li>• So, how does classroom teacher know the SEND learners within classroom?</li><li>• When, is it at early of year or late ?</li><li>• How?</li><li>• Who is included? SENCO, Meeting with SENCO, family? if the school defined the child with need within inclusive setting, do you create a special plan to cope with gaps? are you the person</li></ul>																	

<p>the question for teacher. Sunday is a tough day as a starter. I draw the setting structure and copy the timetable of Sunday. Without any background, I recorded as Math lesson's objective for Math: Using Mental strategies to solve math calculations. All of the sudden, a lady come in and walking around the students' desks. My eyes ignored her to avoid any wonder sights. She came with kind smile. She began introducing herself. She is the Additional Learning Needs teacher assistant (ALN) refers to SEND Teacher Assistant call (TA 2) She showed me her room and speaks to me that explaining the process of confirming that the child needs support. It was such a warm conversation I going between us.</p>	<ul style="list-style-type: none"> <li>• who responsible to create the IEP or SEND teacher or the SENCO? Or Both of you? Next day, the ALN teacher responded that She is the one who created.</li> <li>• Who review the goals set by the team?</li> </ul> <p>Friendly conversation</p> <ul style="list-style-type: none"> <li>• Researcher: How did you inform that (S1) and (S 2) needs special support?</li> <li>• (TA 2) explained within 25 minutes. She explained that referral is according to WHAT HAPPENED IN THE CLASSROOM.</li> </ul>
<p>step 1# classroom teacher observes lower level in comparison to his level.</p> <p>Step 2# Implement some teaching &amp; learning strategies as differentiation, collaboration, once all of attempts failure</p> <p>step 3# classroom teacher and Special teacher and SEN'CO will refer a letter to parents to point on the problem.</p> <p>step 4# once the child diagnosed, the team will establish the IEP.</p> <p>pull-out is depending on the child need. For guided reading and math, she pulls-out the both students (S 1) and (S 2).</p> <p>ALN role, she keeps supporting students within inclusive classroom. Her supportive role is not only through teaching and learning but by "peer observation" where she reflecting on the setting and on what is happening by giving the classroom teacher her feedback in aim to support and improve the students' achievement. Collaboration among teacher and the SEN teacher. She emphasized teacher role over positive expectations and positive attitude towards inclusion.</p>	

Research Title: The provision of effective -educational services for native Arabic learners with dyslexia in mainstream school – Northern Emirates: A case study			
1/ To what extent educational services provision is effective in primary school in the Northern Emirates to support the SEND learners with Specific Learning difficulties /Dyslexia in both subjects English and Arabic?		2/ What could be recommended to improve the educational services needed for native Arabic, SEND learners who study English as a second Language?	
Focus on;	Thematic Analysis [CODES]		
<ul style="list-style-type: none"><li>• Educational Provision</li><li>• IEP</li><li>• Accommodation/ modification</li><li>• Teaching strategies</li><li>• SPLDs challenges</li><li>• L1 Arabic</li><li>• L2 English</li></ul>	<ul style="list-style-type: none"><li>• Subject: Math</li><li>• Researcher seating changed (hearing issues)</li><li>• Math's (inclusive classroom for (S1))</li><li>• LO: to do mixed operations</li><li>• Aids: The small white boards, markers and numbers cards (Multi-sensory technique as all students</li><li>• Independent work</li><li>• Individual &amp; pairs</li><li>• Shadow position</li><li>• (TA1) role [simplify the content +using body language that used to since he was in grade 3)</li><li>• The child responding to (TA1) and to peers.</li><li>• (TA2) role: monitoring (S1) and helping any other students</li><li>• Classroom teacher role [ no attention to (S 1)]</li><li>• Positive inclusive classroom in Maths</li><li>• Classroom teacher monitoring /</li><li>• (S1) motivated and engaged: [ when teacher gives him attention, he strives to do the task</li><li>• (S1) working hard within inclusive classroom</li><li>• Inclusion in Math's, Science, Grammar</li><li>• Pull-out in guided reading, literacy</li></ul>		
Grade 6	Setting: Private school (general classroom at ALM room behind S1 desk immediately / Arabic / Islamic and Social classrooms		
Student (1)	Participant: he is late, then his mom texted me by WhatsApp that he is sick and will be absent		
Day 2: Monday	Subject		
Time in :09:00 am during math			
Time Out: 01:30 pm			
Descriptive Field Notes	Reflective Field Notes / development		
Math 09:00 am I attended math class at 09:00 am. I sat at the back of classroom in the right side in aim to watch (S 1) because if I set at the left side , the pillar is blocking the scene. I am not comfortable that I'm unable to hear him but able to see. S 1 was setting next to his Shadow teacher LO: to do mixed operations in math.	(S 1) is included in general classroom in Math, Science and Grammar but not literacy and guided reading. (S1) doesn't feel that he is different because the same Aids used to other		



<p>The small white boards, markers and numbers cards. Students given math problems. It was individual work and pairs. Depends on the need. ALN was walking around the whole classroom to help all students who need a help.</p> <p>I sat behind the child group to observe him accurately and to do not distracting students. (S1) &amp; his colleagues were used the same aids (Cards and boards).</p> <p>Multi-sensory technique is appeared.</p> <p>The Shadow teacher simplify the operations and break down them into separated ones. She used her body language and using her hands (flashing hands/ pop up fingers) for him. He was responding positively.</p> <p>(S1) reaction General teacher role: General teacher walking around students to help. Integrated in group. student became active and striving to do the task.</p> <p>Shadow teacher role: I reached her setting and whispered "What do you have ? what is about ? I says:" Its very hard for him, I use another method". I couldn't able to continue asking "What is the method?" to avoid distracting her instruction.</p> <p>Islamic 09:20 am</p> <p>I introduced myself in a harry and entered the Islamic club. Teacher started with routine that he discussed the new concept "volunteering in Islam" " التطوع". Teacher asked students to define the meaning</p> <ul style="list-style-type: none"> <li>• (S1) was off task, he sucks his fingers</li> <li>• Biting his nails</li> <li>• Attempt to participate but after longtime. Teacher asked him to answer, he came with example but his peers didn't give him opportunity to answer because he is slow.</li> <li>• He mimicked his peers in copying their answer.</li> </ul> <p>Islamic teacher identified the volunteering concept and translate a verse in the Holy Quran Al Ensan chapter, verse (9). There were two meanings of this verse. One is abstract and the other is concrete.</p> <ul style="list-style-type: none"> <li>• S 1 is unable to understand the abstract meanings</li> <li>• Any deductive question, was very hard to him to understand.</li> </ul> <p>He was in Islamic classes nervous</p> <p>His peers not giving him time to release the answer.</p> <p>There was no any exceptional plan for struggled students. There was no differentiation.</p> <p>Often, teacher uses groupwork &amp; discussions techniques for the whole students.</p> <p>S 1 was super collaborative but copying without sense.</p> <p>English general class</p> <p>Usually, S 1 is not included in this session because of his IEP. He used to be pulled out to ALN room where she tutoring a small group. Today, he was included within general classroom to take the READING TEST.</p>	<p>What was the math method that shadow teacher used to facilitate the calculations?</p> <p>CODE:</p> <ul style="list-style-type: none"> <li>• Subject: Inclusive classroom (Islamic)</li> <li>• (S1) off task during Islamic session</li> <li>• Nervous (eating his clothes or nails) sucks fingers</li> <li>• It's inclusive class but classmate's behavior is not friendly</li> <li>• No collaboration in Islamic session</li> <li>• Challenges</li> <li>• Abstract is complicated to be understood,</li> <li>• Copying answers / no sense</li> <li>• No provisions</li> <li>• He and all the same fit</li> </ul> <p>CODE:</p> <ul style="list-style-type: none"> <li>• Subject: Literacy class (excluded)</li> <li>• Pull-out</li> <li>• ALN: small group/ prepared classroom</li> <li>• Included for READING TEST</li> </ul>
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<ul style="list-style-type: none"> <li>Arabic teacher model one example but even bright student doesn't understand and S1 as well. He copied, outlined and raised his hand.</li> <li>Teacher used decoding to solve the activity but it was hard for S1</li> <li>I asked him to explain to me what is required to this activity? E</li> <li>He explains to me the requirement but he copied the answer.</li> </ul> <p>Friendly conversation with Arabic teacher after students leaving.</p> <p>Arabic teacher : asked me, what you are doing? What is your role with this classroom?</p> <p>The researcher : "I am a researcher, a master's student from BUID. My major is inclusive education. My dissertation is about the provision of educational services to SEND learners in both language subjects L1 (Arabic and L2 English).</p> <p>AT : he was wondered!" who diagnosed with SN in my classroom? Is there anyone.</p> <p>The researcher : yes (S1) is with SEN who diagnosed with specific Learning difficulties, didn't know!</p> <p>Arabic teacher : No No S1 is not with special needs. he is normal. he similar many others in my estimation</p> <p>40% of Arabic students who attending Arabic A are like S1 level. in the average, just they don't have Arabic foundations. I don't think that they with SEN.</p> <p>The researcher attempted to define the SpLDs and dyslexia test and challenges but he was inconvenient!</p> <p>Arabic teacher: I have another strange student who I doubt that he with SN.</p> <p>The researcher: How do you do when you have strange case?</p> <p>The Arabic teacher: I don't know!</p> <p>The researcher: I told him when to conduct the referral letter to the administration. (in spite of that you try many teaching strategies however, the child remained under his peers' level. I asked him "do not you have communicated with English team? I observed an enormous gap I among educational services provided by school in English to Arabic subject. n coordination for SNED. What is the collaboration between you and English team?</p> <p>Arabic Teacher: He was honest, replied" we are careless (مهملة) in this part of our job.</p> <p>Researcher: do you have ALN in Arabic? Or Teacher assistant?</p> <p>Arabic teacher: this year there is no one. It cancelled by the school administration.</p>	<ul style="list-style-type: none"> <li>The researcher informed him</li> <li>Background of dyslexia/ LD ( none)</li> <li>Teacher believe ( s1) level is normal and the majority of pupils in ESL are the same as 40%</li> <li>Teacher attitude about collaboration with English team</li> <li>Admin didn't inform him about the visitor (researcher)</li> <li>(poor coordination)</li> <li>School structure complicated</li> <li>Provision (No ALN TA for grade 6 )</li> <li>Wonder! Why there is no provisions for SEN in Arabic?</li> <li>Student: set in group</li> <li>Group is negative (the student hidden in )</li> <li>He copies the answer with no sense</li> <li>Challenge: coding activity like the abstract ideas for him</li> </ul> <p>I asked S1 in friendly way during our transition to Arabic club, how was the reading test? Was it tough as it described? : ❌</p> <p>He replied: "معيص"</p> <p>It's a word in Arabic used to say: not so bad. In this time S1 became more independent and he was super positive.</p> <p>Bilingual TA could help to explain to him as in his L1 is easier to understand. His positive determine and challenge tells that integration and inclusion is effective in this case.</p> <p>CODES</p> <p>Shadow role</p> <p>Positive:</p> <ul style="list-style-type: none"> <li>uses strategies suitable for his level</li> <li>she is patient, repeats and adaptive</li> <li>he understands her facials (experience)</li> </ul> <p>Negative:</p> <ul style="list-style-type: none"> <li>Isolates the child</li> <li>his social skills limited</li> <li>classroom teachers become dependable</li> <li>He bullied sometimes</li> </ul>
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<p>Friendly conversation with ALN why do you use bright colors and attractive visual tools?</p> <p>Creating a group of three is positive step emotionally and socially. This way is one of his personality. but shadow teacher existence isolated (S1). his peers were in a side and he was in another , like that he was absent because he spent discussing and depending on the shadow teacher to do hid task( she discuss, suggest, read, write )</p> <p>Asking Shadow" Why do you not leave him to write 50% of answers. <b>Suggestion for the IEP</b></p> <p>negative role here! Group work was the best way of hidden needs of S1 . He copied answers, teacher is tolerant with students who not interacting. Groupwork is playing This question for SENCO: Do Arabic section have ALD or SN teacher or TA? Reflection: How to ask the Arabic teacher about the IEP while he doesn't know any thing about the SEND learners أصلًا كيف اسأل عن الخدمات المقدمة بينما الأستاذ لا يعلم</p>	
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Focus on; <ul style="list-style-type: none"><li>• Educational Provision</li><li>• IEP</li><li>• Accommodation/ modification</li><li>• Teaching strategies</li><li>• SPLDs challenges</li><li>• L1 Arabic</li><li>• L2 English</li></ul>		CODES: <ul style="list-style-type: none"><li>• Shadow role</li></ul>		
Grade 6	Setting: Private school( general classroom at ALN room behind S1 desk immediately / Arabic / Islamic and Social classrooms			
Case pseudonym : S 1	Participant: he is late, then his mom texted me by WhatsApp that he is sick and will be absent			
Day 2: Tuesday October 15 : literacy/ grammar / Part of speech Time in: 08:00 Out: 12:45	Subject ICT 8:00 Math 8:40 Islamic 9:20 Break time 10:00 Literacy 10:20 Literacy 11:00 Arabic 11:40 social 1:40			
Descriptive Field Notes English Language 8:00 LO To identify parts of speech in sentences written in the text  Researcher seat: at the back of the classroom where I am able to watch S1 and shadow teacher. But I am unable to watch the interaction exactly. I am not comfortable. I forced to set behind his group directly, finally, I sat with S 1 next to his peer. I aimed to watch what's happening in a minute!  Activity: every student has his own white board which divided into sections of part speech		Reflective Field Notes / development  CODE <ul style="list-style-type: none"><li>• Subject "grammar"</li><li>• Grammar (included S1)</li><li>• Provision (TA1) shadow teacher</li><li>• Shadow teacher role</li><li>• Shadow teacher (Accommodation &amp; Simplifying)</li><li>• Classroom teacher instruction "engaged all students"</li></ul>		

<table border="1"> <tr> <td data-bbox="256 987 309 1279">Noun</td><td data-bbox="256 1279 309 1547">verb</td><td data-bbox="256 1547 309 1834">Adjectives</td></tr> <tr> <td data-bbox="309 987 363 1279">Adverb</td><td data-bbox="309 1279 363 1547">Conjunction</td><td data-bbox="309 1547 363 1834">pronoun</td></tr> </table>	Noun	verb	Adjectives	Adverb	Conjunction	pronoun	<p>(S1): is included during the grammar lesson (shadow teacher sets beside him)</p> <p>Instruction: classroom teacher style: after he reviewed the part pf speech lesson, he asked students to do the activity. Once they integrated and worked on it, he paused them to listen to his instruction and watching his modeling of the activity. Then, he asked them again to turn back and complete what they have start. He models an example (dissects the parts of the sentence) and asks students define the parts, one by one.</p> <p>Teacher asked students to miming the verbs. S1 was active during this activity because of the acting the verbs.</p> <p>What did I see on (s1) desk!</p> <p>The activity asked to define and category each word in the lesson (one page presented on the screen for all students).</p> <p>The (s1) and the shadow keep listening to teacher instruction and modeling.</p> <p>When students turn to do the work, shadow teacher break down the requirements into small chunks. She discussing each single detail. She activating his desire by using her speech, body language, gestures, facials and whiteboard. Whatever he tells, she turns to record his participation. For example, she asked" What is whispered definition? Where do you going to put under? She miming the verb (whispered and he record his answer in his white board).</p> <p>Assessment! Formative assessment!</p> <p>Teacher ask individuals to tell what do they have, then he records their answer in their category (on the white board)</p> <p>Knowing the scene (2<sup>nd</sup> hour)</p> <p>On the smart screen</p> <p>LO. I can identify objects from setting.</p> <p>I can demonstrate a good understanding of the scenes.</p> <p>I can use descriptive language in my sentence.</p> <p>I can extend my sentence with noun phrase.</p> <p>With your partner create a sentence for each picture.</p> <p>Another activity that was presented on the smart screen for all student.</p> <p>Aids: 4 pictures shown and 4 words written on the column.</p> <p>Students asked to define each word and match each picture to the word.</p> <p>Teacher explain some pictures to help students to facilitate the definitions.</p> <p>Teacher asked S1" What do you see in this picture?"</p> <p>S1 answers accurately but after longtime. Teacher was waiting.</p> <p>Forest</p> <p>Old mill</p> <p>Pond</p> <p>Dragonflies</p>	<ul style="list-style-type: none"> <li>Class teacher formative assessment [teacher ask volunteers to give his answer, the volunteer answer, from their white boards to his white board to share it with all.</li> <li>Student 1 : answer accurately but takes time</li> <li>Challenge: slow processing</li> <li>S 1 interacted positively and willing to work</li> <li>Visual aids (pictures)</li> <li>learning style (VIX)</li> </ul> <p>He is active and positive to be included, he did his best to show up his best effort.</p>
Noun	verb	Adjectives						
Adverb	Conjunction	pronoun						

<p>Unicorn Reeds Twisted roots Goblins</p> <p>Then, teacher asked about what goblins could belong to which type of genre? Fancy, fiction, nonfiction. Literacy lesson is done!</p> <p>ALN room, 08:55 am S1 sets in group of 2 members who needs additional learning needs not because of disability but because of second language challenges. and his shadow.</p> <p>ALN presented the colorful passage with pictures.</p> <p>LO. To review the vocabulary pronunciation and definition To spell and write 10 words To assess themselves by green pen Wow! got 8/10</p> <p>LO. To review the story by using the smart screen of pictures pages and pictures. To retell the sequential events. She asked "what is happening? Who is this girl? What does this picture tell? "Ruby Bridges" S1 was not participating because he was absent when ALN teacher taught this lesson. He was nervous anxious, hyperactive, biting his fingers, tie, he was looked at his shadow face all the day. Waiting what she says, what she directs him to do.</p> <ul style="list-style-type: none"> <li>Students will transfer to persuasive writing task</li> <li>Step 1# fill the boxes</li> <li>Step 2# copy from boxes to draft</li> <li>Step 3# copy to the final draft on a poster.</li> <li>S 1 discussed with shadow teacher positively and actively. He gave his suggestions/opinions, ideas.</li> <li>Shadow was giving her attention completely.</li> <li>The intervention:</li> <li>On Monday, shadow teacher writes in the boxes (S1) ideas and sentences.</li> <li>On Tuesday, He copied from boxes to 1<sup>st</sup> draft.</li> <li>His concentration was limited because he was thinking of one idea (visiting Abu Dhabi in the weekend).</li> <li>Shadow teacher recognized that S1 is bored! She used a technique that changing the roles of both of them!</li> <li>When he says the sentence, she script it on the white board( one by one), then he read what is written, next he copies the sentence which is easier to him because HE FOCUSES ON ONE &lt; SIMPLE SENTENCE. No way to escape his knowledge but by balance.</li> </ul> <p>Library S1 is included to reading with peers at the library and borrows books. He was off task in the library without his shadow. He was talking and disrupting his friends, covering his face to chatting with friends, he was acting that his reading but he wasn't. NOTES!</p>	<p>Using visual aids is effective. Using smart board is effective.</p> <p>Code</p> <ul style="list-style-type: none"> <li>subject: ALN</li> <li>small group</li> <li>not all with SEN</li> <li>some with language barriers</li> <li>pull-out / effective</li> <li>attendance impact (negative)</li> <li>student behavior/ Anxious Nervous hyperactive Off-task</li> <li>shadow teacher role/ reaction+</li> <li>Subject: Library</li> <li>Reading individual and silently.</li> <li>Student reaction (not engaged, not motivated)</li> <li>Misbehaved (chatting)</li> <li>Motivation is a key element to learn</li> <li>Class teacher / monitoring and guiding S1</li> </ul> <p>Example of Shadow teacher effective reaction Today shadow teacher was amazing and professional. When (S1) refused to write she let him read, when he refuses to write she encourages him to read, when he refuses to read, she discusses with him orally, then, she writes his responding, finally, she asked him to copy what she wrote. The conclusion she jumped among all literacy skills in one time as long that not distracting the child (S1). ALN teacher mentioned that Additional learning needs is different than SEND. NOTE! break down the writing task into chunks that manage his attention and focusing on the task.</p>
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<p>Classroom teacher supporting. He observed that, he turned to (s1) and asked him to share his story with teacher. (s1) was reading and /teacher was listening and discussing.</p> <p>Once teacher left him, he turned back to misbehavior. He couldn't able to be settled</p> <p><b>Important notes</b></p> <p><b>Math</b></p> <p>I am set at the back of classroom. (s1) is included with his shadow. Teacher reviewed "What meant by Value expression?"</p> <p>I got Teacher permission to join (s1) group. Then, I asked S1 and his peers and shadow if they don't mind to follow them that I felt board behind.</p> <p>Activity aid: rolling the dice 5 times, every time number appeared will be recorded without symbols.</p> <p>The activity asking students individually to choose symbols to mixed the operations then</p> <p>To get the sum at it appeared by rolling the dice.</p> <p>(I am comfortable with my seating now, I can hear and witness the matters).</p> <p>Shadow teacher role: she uses the white board and markers. She asking S1 verbally (discuss with him loudly) he responding. then she records his answer. She reviews with him after that.</p> <p>She asked</p> <p>He responding (often he is predicting)</p> <p>She recording his answer</p> <p><b>Note:</b> Shadow teacher mentioned that he is good in math, he understands but the issues that he confuses when symbols and multiple steps overlapped. She continued that when she discussed with him as telling ( Add to – take out of ) he gets the point faster.</p> <p>But in general, he is in best position rather than last year. He couldn't manage the addition operations, so multiplication and division initially weren't. ( Note : Mom tells the same in friendly conversation)</p> <p><b>Classroom teacher style:</b></p> <ul style="list-style-type: none"> <li>• Instruct the question ( maths problem)</li> <li>• Asking students to solve independently.</li> <li>• Walking, monitoring and helping who needs one-one instruction.</li> <li>• Then modeling to the whole classroom on the board.</li> </ul> <p><b>Arabic lesson</b></p> <p>The Arabic teacher gives (s1) attention. He was monitoring S1 him going back and forth to s1 (s1) was participating actively in the warming up activity. It was clear that he understands it However, when the task became overlapped he lost the task. He rescued himself by copying from his friends. Teacher assured that (s1) understood the lesson (the sentences types) by one-one discussion.</p>	<p>Today shadow teacher was amazing and professional. When (s1) refused to write she let him read, when he refuses to write she encourages him to read. When he refuses to read she discusses with him orally, then, she write his response, finally, she asked him to copy what she wrote. The conclusion she jumped among all literacy skills in one time as long that not distracting the child (Z).</p> <p><b>Code</b></p> <ul style="list-style-type: none"> <li>• Subject: Math</li> <li>• Student included</li> <li>• Shadow is there</li> <li>• Activity aids: rolling dice, say the number, read it, make mixed operation, write on WB</li> <li>• Teaching strategies</li> <li>• Kinesthetic style</li> <li>• Strengthen sensory motor skills</li> <li>• Using play in teaching ( joyful)</li> <li>• Shadow role: writer, correct to him by discussion</li> <li>• Student role: he predicts, random answers</li> <li>• Class teacher reaction: dealing with S1 as all, he didn't give more attention</li> <li>• Shadow comments on S1 challenges in math</li> <li>• Shadow comments on S1 progress in math</li> <li>•</li> </ul> <p><b>Code</b></p> <ul style="list-style-type: none"> <li>• Subject: Arabic</li> <li>• Student: included / no TA</li> <li>• Teacher: gives attention (he became aware)</li> <li>• Teacher passionate to support</li> <li>• Teacher awareness about SEN is limited</li> <li>• Teacher assess S1 after each small step in lesson plan to ensure that he accommodated</li> <li>• Student: participated positively (revision)</li> <li>• Challenge (complicated concepts)</li> <li>• Needs simplifying</li> <li>• Hidden challenge in group members</li> <li>• Student: nervous (putting his emotions in copying as that one of his best ability</li> </ul>
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	Arabic teacher wasn't believed that (S1) is with SEN,(Dyslexia). He mentioned that the student is normal as approximately 40% with the same symptoms. He thinks, that (s1) and other students with gaps hadn't received an effective foundation in Arabic, that's why he has a gap but not dyslexia.	
	Researcher indicated that Arabic teacher cannot distinguish the difference between SEN with dyslexia to lower achievers without SEN	
Research Title: The provision of effective -educational services for native Arabic learners with SpLDs in private primary school- Northern Emirates: A case study		
1/ To what extent educational services provision is effective in primary school in Northern Emirates to support the SEND learners with Specific Learning difficulties /Dyslexia in both subjects English and Arabic?	2/ What could be recommended to improve the educational services needed for native Arabic, SEND learners who study English as a second Language?	
Focus on; <ul style="list-style-type: none"><li>Educational Provision</li><li>IEP</li><li>Accommodation/ modification</li><li>Teaching strategies</li><li>SPLDs challenges</li><li>L1 Arabic</li><li>L2 English</li></ul>	Focus on; <ul style="list-style-type: none"><li>Suggestions / recommendations</li></ul>	
Grade 6		Setting: Private school (general classroom at ALN room behind S1 desk immediately / Arabic / Islamic and Social classrooms
Case code: S1	Participant: he is late, then his mom texted me by WhatsApp that he is sick and will be absent	
Day 4 Wednesday	Subject Maths	09:45
Time in: 09:45 am		
Reflective Field Notes / development		
Questions1# for Arabic and English Teachers:  What are the challenges that (s1) facing in your subjects?  Is that similar to all native Arabic students? He answered" unfortunately, the majority of students in ESL school are similar to S1 , but S1 is motivated to learn and collaborative!		
Researcher Question 1#		



<p>Does (S1) understand these points (decimals and percentages)?</p> <p>Researcher seating: I have joined ((S1) group. After greeting them, researcher asked ((S1): how is the lesson? He replied" very good".</p> <p>As Classroom teacher used to do,</p> <p>Firstly, he explained some cornerstones in the lesson,</p> <p>Secondly, asked students to solve some questions on the smart screen</p> <p>Thirdly, after students try to do so, he turned to model some ways to solve the questions, so he fills the gaps that he observed during their independent effort.</p> <p>Finally, students being able to do the work independently and confidently.</p> <p>Researcher Question2# asked the shadow teacher</p> <p>Does ((S1) facing challenges in this lesson, where it addressed more than ideas?</p> <p>Shadow teacher:" No, he is fine! He is in the average, he understood, but the issue that he faced is the confusion amongst operations' symbols. However, when I speak to him and exchange using the symbols by using the speech. for example, instead of using + symbol, I would say" add to "or take out "he gets the purpose of questions faster.</p> <p>Reflection! Low self-esteem</p> <p>In math ((S1) learning styles is auditory, another point that he is usually show that he is uncomfortable with his answer, poor self-esteem because he is unconfident of his own answer or the way of solving the questions, usually, he turns to check his work by comparing to his friends or looking at the shadow facial as waiting her permission for what he did. <b>TO COMPARE TO WHAT EXTENT THAT (S1) PROVIDED WITH EDUCATIONAL SERVICES TO MEET HIS NEEDS.</b></p> <p>Break time!</p> <p>I asked the ALN permission just to have a look of the recommendations for (S1) that addressed in his diagnostic report. It was in my inbox that emailed by (S1's) mom.</p>	<p>Question 2# for English teacher</p> <p>What is Individualized Educational plan for (S1) when he included?</p> <p>Is there any modification in the curriculum / assessment for ((S1)?</p> <p>He answered: no modification in assessments but I used to give him as lower achiever level</p> <p>CODE</p> <ul style="list-style-type: none"> <li>• Subject Math (decimals, fraction, operation)</li> <li>• Student included</li> <li>• Challenges: confused with symbols</li> <li>• Confused with overlapped processes</li> <li>• Provision (no IEP, No modification)</li> <li>• Provision (shadow teacher)</li> <li>• Teacher: S1 is motivated to learn and collaborative!</li> <li>• Teacher: considers S1 as with low ability level that not modify the curriculum</li> <li>• Shadow role prevent social interaction with peers</li> <li>• Student: Confusion in complicated operations in Math</li> <li>• Student: Low self-esteem affecting his learning</li> <li>• He Doesn't trust his own answers</li> <li>• Having shadow teacher lead to poor self-esteem</li> <li>• He dependent on shadow</li> </ul> <p>CODE</p> <ul style="list-style-type: none"> <li>• Subject: English (persuasive writing</li> <li>• Student: pull-out</li> <li>• ALN club: (small group/ reinforcement)</li> <li>• Student: daydreaming ( weekend)</li> <li>• Student: hyperactive</li> <li>• Student: say</li> <li>• Shadow records his answers on his notebook</li> </ul>
<p>Persuasive Writing task (ALN) 11:07 am</p> <p>((S1) and his classmates (S and R) attended the ALN session.</p> <p>((S1) and his shadow sat next each other. He was a hyper active and off task the beginning. he was repeating a sentence for more that 4 times" I will travel to Abu Dhabi"</p> <p>Researcher seat: behind and not next to him but next to other. Just to let he feel free to act as he would like to.</p> <p>After few minutes, he came again to the task land.</p> <ul style="list-style-type: none"> <li>• He started discussing and integrated on the task.</li> <li>• Creating sentences (verbally) and the shadow recording on his white board.</li> <li>• ((S1) is monitored by ALN, she</li> <li>• keeps reinforcing him.</li> </ul>	

<p>Arabic lesson (11:44)</p> <p>The 5<sup>th</sup> period before the lunch break.</p> <p>Arabic test.</p> <p>(s1) included, he considered as all students with no special accommodation or modification.</p> <p>Researcher Question</p> <ul style="list-style-type: none"> <li>Is HE IDENTIFIED WITH SEND IN ARABIC SUBJECTS AS HE IS IN ENGLISH SUBJECTS?</li> <li>WHERE IS THE PROVISION?</li> <li>On Monday, the researcher interviewed the Arabic teacher (unstructured interview) that asking about the IEP for ((s1)). Teacher had no idea about the identification of ((s1)) needs.</li> <li>at the beginning ((s1)) spent time not moving on. Just biting his fingers and his pencil.</li> </ul> <p>ASSESSMENT</p> <ul style="list-style-type: none"> <li>teacher role : Today, during the TEST, He monitored ((s1)) and any time ((s1)) asking the help, teacher comes and explain the question meaning.</li> <li>((s1)) doesn't hesitate to ask teacher the help as most of students do in Arabic subject.</li> <li>It is very clear, that after he listen to the explanation of question, he carries on and complete with enthusiasm.</li> <li>He is given time as all students have. (no more time)</li> </ul> <p>● He got 12 /20 (on Thursday I got his result).</p> <p>Science</p> <p>Lesson title</p> <p>The Human Digestive System</p> <p>Each student has his own worksheet</p> <p>((s1)) has the same worksheet</p> <p>NOTE!</p> <p>I didn't find any differentiation!</p> <p>((s1)) discussed with the shadow about the pictures</p> <p>Teacher played two videos.</p> <ul style="list-style-type: none"> <li>The first video was a cartoon (How the digestive system works?) about food journey, while the second was about the real digestive journey by camera.</li> <li>The second: Video 2#</li> </ul> <p>"Operation Ouch".</p> <p>After showing the videos</p>	<p>CODE</p> <ul style="list-style-type: none"> <li>Subject: Arabic</li> <li>TA (none).</li> <li>Teacher: willing to support but ( poor knowledge+ poor training about SEND</li> <li>Primary School inclusive policy implementation</li> <li>provisions in Arabic( none) but Mom</li> <li>IEP/ Accommodation &amp; Modification not there</li> <li>Student! treated as lower achiever with low ability</li> <li>Conflict in what admin say and what teacher say</li> <li>Arabic assessment</li> <li>No modification</li> <li>Assessment format not accommodated! Needs a paper with bigger font.</li> <li>Teacher support by monitoring and read questions and remind the s1</li> <li>Student reaction: was frozen, he daydreamed, after teacher care, he became active and did all writing and reading independently.</li> <li>Student: asks teacher help to read the test</li> <li>Test: no extra time / No one reads loudly</li> <li>No services in Arabic during the test</li> <li>SENCO: Overlays were effective with s1(pink)</li> <li>Challenges: reading</li> </ul> <p>Researcher reflection:</p> <p>READING IS HARDER TO ((s1)).</p> <p>((s1)) needs to hear the questions instead of reading.</p> <p>Another point that could confused ((s1)) that the test format.</p> <p>It was a poem in separate page, students asked to get part of speech from that poem.</p> <p>For ((s1)) it was complicated, he needs to see each sentence alone for focus. My suggestion is to make the font bigger with colors or electronic test.</p> <p>Arabic teacher mentioned" that Teacher assistant should be here to help him, because many students asked the support but there is only one. Teacher time is not enough for all students so he needs a helper.</p> <p>Code</p> <ul style="list-style-type: none"> <li>Subject: science (included s1)</li> <li>Topic: Digestive system</li> <li>Aids: Videos and worksheet (cut and paste to match the body parts and definitions)</li> </ul>
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<p>Teacher asked: "What is the purpose of camera going though digestive.....?" ((s1) is off-task. It was a complicated function. For him, he needs to understand it in Arabic firstly, then in the second language.</p> <p>(formative assessment at the end of the lesson)</p> <p>Activity (WORKSHEET) stick the pictures of digestive system parts.</p> <ol style="list-style-type: none"> <li>1. Stomach</li> <li>2. Small intestine</li> <li>3. Large intestine</li> </ol> <p>shadow teacher role:</p> <p>She constructed the lesson, what did you see in this video?</p> <p>He responded but he was (Exhausted) he kept asking "What's the time? What's the time?"</p> <p>She cuts the pictures,</p> <p>She pointed on each part, then asked what the role of this part?</p> <p>She read the vocab, he repeated without attention.</p> <p>NOTE! He was inactive because the time.</p>	<ul style="list-style-type: none"> <li>• Provision: Shadow</li> <li>• Shadow: instructing the lesson again by simplifying. Asking, reading, cutting pictures, pointing on each part, then asked what the role of this part?</li> <li>• Dependent ( she cuts , justify : if he cuts, takes time)</li> <li>• No differentiation</li> <li>• Formative assessment (worksheet) after discussing the whole lesson</li> <li>• Student: doesn't understand the digestive concept from shadow in English, once researcher explains to him in L1 he got it and keeps trying to complete the activity.</li> <li>• Complicated/ overlapped terms or process in L2 difficult but in L1 easier</li> <li>• Conflict: no IEP in science.</li> <li>• Assessment in reports:</li> <li>• Wonders!</li> </ul> <p>How does classroom teacher assess ((s1) for this lesson?</p> <p>Who assess (s1 ) during the inclusion?</p> <p>At this time, I think that I need to interview (s1 ) ?</p> <p>Also, I have to interview his mom.</p> <p>ALN teacher mentioned that ALN is different that SEND.</p> <p>Friendly conversation</p> <p>The researcher / shadow and the ALN teacher discussed the need for a support in Arabic for (s1). I described his need that I observed and limited time and needing support during Arabic classes.</p> <p>Also, I suggested that the positive attitude that Arabic teacher has and his readiness to collaborate with English team to support students with special needs. Cooperation among staff would support students' needs.</p> <p>Arabic teacher wasn't believed that ((s1) is with special learning disabilities (SPLD). By the way" teacher doesn't know what SPLD mean. He mentioned that the student is normal as approximately 40% with the same symptoms. He thinks, that ((s1) and other students with gaps hadn't received an effective foundation in Arabic, that's why he has a gap but not SPLDs.</p> <p>Researcher indicated that Arabic teacher cannot distinguish the difference between cognitive needs as SPLD and learning needs.</p>
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<p><b>RECOMMENDATION</b> As (s1) facing less challenges in his L1(ARABIC), he needs bilingual shadow to explain the new concepts and complicated terms in Arabic then translated to L2 (ENGLISH).</p> <ul style="list-style-type: none"> <li>• How does classroom teacher assess ((s1) for this lesson? Who assess ((s1 ) during the inclusion?</li> </ul> <p>Why doesn't he cut? Researcher asked It will take long time! Shadow replied</p>	
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Research Title: The provision of effective -educational services for native Arabic learners with SpLDs in private primary school- Northern Emirates: A case study				
1/ To what extent educational services provision is effective in primary school in the Northern Emirates to support the SEND learners with Specific Learning difficulties /Dyslexia in both subjects English and Arabic?		2/ What could be recommended to improve the educational services needed for native Arabic, SEND learners who study English as a second Language?		
q				
Focus on;		Focus on;		
<ul style="list-style-type: none"><li>• Educational Provision</li><li>• IEP</li><li>• Accommodation/ modification</li><li>• Teaching strategies</li><li>• SPLDs challenges</li><li>• L1 Arabic</li><li>• L2 English</li></ul>		<ul style="list-style-type: none"><li>• Suggestions / recommendations</li></ul>		
Grade 6		Setting: Private school (general classroom at ALN room behind S1 desk immediately / Arabic / Islamic and Social classrooms		
Case code: S1		Participant: he is late, then his mom texted me by WhatsApp that he is sick and will be absent		
Day 5 Thursday				
Time in 09:15				
Time out: 01:30		Subject		
Descriptive Field Notes		Reflective Field Notes / development		
Math				
Multiplication 2-digit numbers (complicated for (s1) The researcher attended at the end of the Math lesson. ((s1) and the shadow weren't good. They were upset and nervous. It seemed to be a revision. (s1) was off-task.  The math period is done, the ALN group transferred to the special room. During that transition, the shadow told that he refused to do any work today. He said" / don't want any of your support"		Code		
		<ul style="list-style-type: none"><li>• Subject: math (multiplication 2 digits</li><li>• Student: included</li><li>• Challenges: complicated steps</li><li>• Student1: uncooperative with shadow</li><li>• S1 off task / upset</li><li>• Bullying</li></ul>		
		code		
		<ul style="list-style-type: none"><li>• Subject: ALN</li><li>• Pull-out session</li><li>• Student depressed, sad,</li><li>• self-assessment used</li><li>• student: slow down, not except shadow</li><li>• student then, read actively</li><li>• student' emotional and sensitive</li><li>• (s1) needs extended time</li><li>• Peer-assessment</li></ul>		

<p>Step 1# Warming up: review the vocabulary (reading) on the screen          ((s1) played teacher role, he points on the word and his peers on their seats read the words. Each student play teacher role in this activity in turns.          ((s1) was active reader (sat away of his shadow)</p> <p>Step 2# dictation          Both boys wrote the list of words from themselves, they spent a week working on this list of vocabulary.          ((s1) he done all, (self-assessment used) he gets full mark, but he needed extended time</p> <p>Step 3# reading the story page by page by students in turns.          ((s1) read 2 pages loudly as a computer but he reads. Wow! Wow!</p> <p>Step 4# reflection          Write your reflection          ((s1) he wrote his reflection and read it loudly and confidently.</p> <p>Reflection !          ((s1) he wrote his reflection and read it loudly and confidently.          The intervention is effective          He could read, spells, using self- assessment and answer the comprehension.</p> <p>Step 5# share your reflection</p> <p>English within classroom          Spelling test of 20 words          ((s1) gets 20/20 only shadow helps him in 2 words.          ((s1) didn't given extended time.          What could happen without the shadow?          Shadow teacher mentioned that "students have been practiced these words list, I helped him in some words."          Peer-assessment used to correct the spelling assessment. When teacher knows the (s1) score, he surprised as no convenience.</p> <p>Recommendations for Provision          ((s1) needs extended time</p> <p>Moral education          ((s1) not included</p> <p>ALN session persuasive writing          He done the poster          ((s1) copying from his draft          Shadow: helping him by pointing on the line that he copying.          She line and design the page, only what he did was copying.          This poster has sequenced stages since a week.</p> <p>It was such a good day for him but not at the beginning: ☹️</p>	<ul style="list-style-type: none"> <li>Student in pull out session bright ( sensitive)</li> </ul> <p>He was mad because of bullying!</p> <p>Code</p> <ul style="list-style-type: none"> <li>Subject: English language</li> <li>Student: included (general classroom)</li> <li>Provision: shadow</li> <li>Spelling assessment (s1 included)</li> <li>peer assessment used</li> <li>Spelling assessment: needs extra time</li> <li>Challenges: none, he practiced with shadow</li> </ul> <p>Recommendations for Provision          ((s1) needs extended time</p> <p>Clues          Glossary          Fair brave laws separate south ( to help students to write their reflection)</p>
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<p>Arabic session (11:40)</p> <p>((s1) is integrated in a group of active learners in Arabic language.</p> <p>Arabic Dictation assessment that students didn't practiced at home which tells that ((s1 ) does great work.</p> <p>He was independent and confident to do it.</p> <p>When he finds any opportunity to compare his work to partner, he did.</p> <p>Today, the TA came to help ((s1) and another student. ((s1) refused to turn his eyes on her. Not at all.</p> <p>Warming up Activity:</p> <p>Group work</p> <p>His group members weren't collaborative.</p> <p>They refused to share or discuss with ((s1) during the activity.</p> <p>One of them said" oh poor (s1), he can't do it"</p> <ul style="list-style-type: none"> <li>• Arabic teacher advocated "He is intelligent, just he needs more time. He done very well in the test".</li> <li>• He was lonely in his group.</li> <li>• His peers ignored him but tries to be integrated.</li> </ul>	<p>Code</p> <ul style="list-style-type: none"> <li>• Subject: Arabic (Dictation)</li> <li>• Student: included</li> <li>• Assessment: sudden spelling test</li> <li>• Provision: TA, student's reaction: didn't accept</li> <li>• Student: independent / without practice/ unconfident, check his peers' work to compare his own work</li> <li>• Inclusion: group, s1 lonely, ignored</li> <li>• Classmates manners are different in Arabic. They don't respect the inclusion in contrast, Mom's : he is spoiled as he youngest child of adult brothers</li> </ul> <p>Is that modification?</p> <p>((s1) now copying from his draft to avoid being off-task, the shadow teacher identified the sentences that will need to copy by putting tick sign and pointing on. The paragraph has 12 lines. For (s1) that seems to be complicated and confusion. So, he cannot focus.</p> <p>I was almost in tears</p> <p>I observed ((s1) last year when he was unable to read as a grade two students, while he is able to read as a sixth graders this year. He became mature.</p> <p>He really not need a shadow in sessions taught using L1 as a medium</p>
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# Findings and Discussions

Provisions factors	English Subjects taught by English Is it effective for the case?	Arabic Subjects taught by Arabic Rationale
• Classroom teacher role	•	•
• ALN role	•	•
• Shadow role	•	•
• IEP (targets/ accommodation/ modification) role	•	•
• Administration	•	•

Observations time table	English Subjects taught by English Is it effective for the case?	Arabic Subjects taught by Arabic Rationale
• Classroom teacher role	•	•
• ALN role	•	•
• Shadow role	•	•
• IEP (targets/ accommodation/ modification) role	•	•
• Administration	•	•

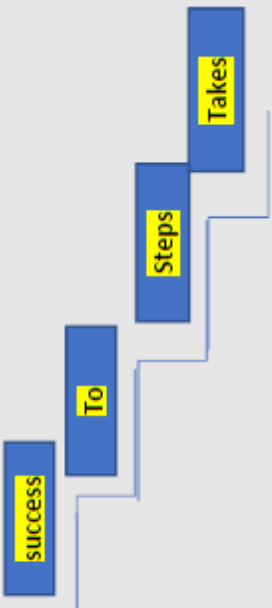


## Appendix 10 Observations and Field Notes for Student 2

Research Title: The provision of effective -educational services for native Arabic learners with dyslexia in a private primary school- in Northern Emirates: A case study			
1/ To what extent educational services provision is effective in primary school in the Northern Emirates to support the SEND learners with Dyslexia in both subjects English and Arabic?		2/ What could be recommended to improve the educational services needed for native Arabic, SEND learners who study English as a second Language?	
<div>Focus on;</div> <ul style="list-style-type: none"><li>Child challenges and strengths</li><li>Educational Provision</li><li>IEP</li><li>Accommodation/ modification</li><li>Teaching strategies</li><li>LDs challenges</li><li>L1 Arabic</li></ul> <div>L2 English</div>		<div>Focus on;</div> <ul style="list-style-type: none"><li>Suggestions / recommendations</li><li>Inclusion: (S) is included in science/ Social studies/ Math/ Spelling, punctuation &amp; grammar/ moral education</li><li>Pull- out (ALN): guided reading /language</li></ul> <div>NOTE! S2 wears eye glasses</div>	
Grade 6 (secondary)		Setting: Private school (general classroom at back& at ALN room)	
Case: S2		Participant: he is late, then his mom texted me by WhatsApp that he is sick and will be absent	
Day 4: Tuesday Time in :8:38 am Time Out: 01:55pm		Population:23	<div>Math Pe Math Arabic English Science DT/ART</div>

Descriptive Field Notes	Reflective Field Notes / development
<p>I am very sick, coughing  <b>S2</b> is included within spelling, punctuation and grammar. Also, he included in math's and Arabic and Islamic.  He is behaved and polite. He ignored peer's bullying.  Shadow teacher role is limited because student (S2). she is setting as a friend.</p> <p><b>Questions raised by the observation notes!</b></p> <ol style="list-style-type: none"> <li>1. What is the IEP prepared for (S2)?</li> <li>2. What is the accommodation?</li> <li>3. What is the modification?</li> <li>4. What's student's academic achievements during the inclusion?</li> <li>5. Is there any modification for assessment?</li> <li>6. Is there any modification for objectives?</li> <li>7. Is (S2) diagnosed with SPLDS?</li> <li>8. Does he provide with educational support services in both English and Arabic subjects?</li> </ol>	<p>Arabic teacher shocked when he saw the corner to observe the SEND with LD.  The researcher asked: "Didn't you informed that you have a child who diagnosed with SPLD?"  He replied: "Not, at all, are you sure! who is it?"  The researcher told: (S2)  <b>NOTE!</b>  The Arabic subject teacher didn't inform from the Administration staff about the SEND, as well as that he didn't informed that a researcher will follow the child during Arabic classes. This incident is repeated again in the same section with another teacher.</p> <p>According to today's matters, I reflected and asking myself  "To what extent the intervention in Arabic subjects could be one of the ways of provision for native "Arabic Learners with SPLDS)?"</p> <p>Miscoordination among English and Arabic teams!  <b>Negligence among teams</b></p> <p>Is that related to Dominant English as a language at that setting or because of the negligence in the system. A clash between Arabic and Administration staff happened. The conflict was revealed!</p> <p>The Arabic teacher of the second case (targeted Student) was wondered and crosses the researcher because as he mentioned that school principals are strict. No one can do the observation until gets the consent from the administrative. The Arabic coordinator questioned me that she wondered what gives me the right to enter the Arabic classroom!</p> <p>All of the sudden, she met the SENCO for the primary.</p>

	<p>Arabic coordinator asked" What is the matter, no one inform me!"</p> <p>The SENCO kept on silent. Then the Arabic understood that I have the permission, she Said: no problem to have the researcher.</p> <p>Note!</p> <p><b>Methodology: interview(I2) class teacher</b></p> <p>I booked an appointment to interview the (Case 1) classroom teacher. He booked Wednesday 23 at 2:35pm. He preferred the live interview where using the record rather than writing the answers. It's DONE 😊</p> <p>Critical incident to book a time with Arabic teacher of the 1<sup>st</sup> CASE (S1). I welcomed him and he was friendly and gentle. Once I spoke about the interview and the need of the arrangement according to his availability. He escaped and ignored me. His peer brought him back. After 7 minutes, he mentioned that he is very busy this week and he avoid the personal questions.</p> <p>He gave me his WhatsApp contact to check with him next week.</p> <p>I emailed the shadow and the SENCO of the secondary to book an appointment to conduct the interviews!</p>
<p>I came when children were in Islamic classroom, classroom mentioned that students have Islamic class, 14 minutes are left. I have attended that last 14 minutes.</p> <p>Islamic studies</p> <ul style="list-style-type: none"> <li>• (S2) is included within all subjects taught by Arabic, his mother language.</li> </ul>	<p>I need to address (S2) diagnostic report. DONE!</p> <p>I need to copy it</p> <p>I took classroom teacher permission to take photos not for persons.</p>

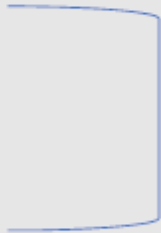
<ul style="list-style-type: none"> <li>• He is polite and quite with eye glasses. He is slim</li> <li>• There were 24 population. Setting in groups.</li> <li>• I sat very far from his group. It was first day, so I didn't try to approach him at all to don't be disturbed.</li> <li>• He didn't engage with the lesson but playing with his whale pen.</li> <li>• The lesson was about prayers, where the teacher using actions to demonstrate the praying.</li> <li>• He was motivated only when a student volunteered to demonstrate the prayer.</li> <li>• He seems that he is listening but he is not following teachers when a part of the lesson was complicated for him.</li> </ul> <p>Math 08:45</p> <ul style="list-style-type: none"> <li>• <b>LO. To use a formal method of long division</b></li> <li>• CLASSROOM teacher started her lesson with inspiration to her students</li> <li>• (S) is included in Math.</li> <li>• She encouraging them to achieve the lesson objectives but with positive attitude. She directs a question to stimulate their thought</li> <li>• "Why do we learn?"</li> <li>• Teacher reviewed the short and long division over math white board.</li> <li>• Step 2#she displayed math problems on the small white board (VISUAL AIDS)</li> <li>• She (MODELING) a math problem.</li> <li>• She solves it with students' participation.</li> <li>• Asks students to solve other questions independently.</li> <li>• She walks around all groups and helps who in need ( 1-1 support)</li> <li>• step 1 modeling</li> <li>• step 2 student independent work</li> <li>• step 3 monitoring</li> </ul>	 <p>Classroom teachers always inspire students to be confident and know WHY do they LEARN?</p>
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<ul style="list-style-type: none"> <li>• step 4 reviewing/ modeling / assessing</li> <li>• step 4 workbook</li> <li>• step 5 self-assessment <b>WOW!</b></li> </ul> <p>What is (S2) doing during math?</p> <ul style="list-style-type: none"> <li>• Included</li> <li>• listen carefully</li> <li>• guided by shadow- teacher, over discussion with extra time.</li> <li>• He is able to access the math with 1-1 support. She simplifying the timetable.</li> <li>• He is familiar with small white board.</li> <li>• He is willing to think and work during, math</li> </ul> <p><b>Spelling/ Punctuation &amp; Grammar</b></p> <p>Review the "comma" in punctuation</p> <ul style="list-style-type: none"> <li>• (S2) is included.</li> <li>• His setting at the same group in math.</li> <li>• (S2) has included in SAT reading test that done last week, when I was observing (S1).</li> <li>• Teacher has speech for all pupils to change their attitude towards the reading assessment's grade.</li> <li>• Teacher reviews the test punctuation, using very small for (S2) and explaining and talking students listening.</li> <li>• (S2) is well behaved.</li> </ul> <p>After the revision!</p> <p><b>WOW!</b></p> <ul style="list-style-type: none"> <li>• Teacher reads with expression.</li> <li>• She reads the same sentence three times; one time is correct.</li> </ul>	<p>I have checked (S2) math note book when he left to rest room, I have seen very big font, not neat, it doesn't seem to be for a sixth graders.</p> <p>When other students have done 3 math's problems, he had one. (needs extra time + 1-1 support)</p> <p><b>WOW!</b></p> <p><b>Math strategy</b></p> <p>Shadow teacher showed me his note book,</p> <p>There are I symbol that means done <b>INDIPENDANTLY</b> while S2 means with <b>SUPPORT</b></p> <p>(S2) at this time, I wish if I could observe both of students during the same situations as reading test)</p> <p>The visual aids in this session was small not suitable for (S2), He started off-task.</p> <p><b>Note!</b></p>
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<p>• Students assess her reading where they define the comma location.</p> <p>Review</p> <p><b>Grammar</b></p> <p><b>Arabic</b> Negligence among teams The conflict was revealed!</p> <p>The Arabic teacher of the second case (targeted Student) was wondered and crossed when he receives the researcher because as he mentioned that policy is strict. No one can do the observation until gets the consent from the administrative. The Arabic coordinator questioned me that she wondered what gives me the right to enter the Arabic classroom. He was not welcome and not friendly with me.</p> <ul style="list-style-type: none"> <li>➤ Arabic teacher, who is the case that you are observe?</li> <li>➤ Researcher, I can't tell while students are listening!</li> <li>➤ Arabic teacher came out of the classroom: who is defined with SN?</li> <li>➤ Researcher: (S2)!</li> <li>➤ Arabic teacher: "What"? How? He is neglected from his family only. He is unable to read or to write.</li> <li>➤ Researcher: Aren't you know your SEND learners?</li> <li>➤ Arabic teacher: "Why did they not inform us about SEND?"</li> <li>➤ He let me enter his classroom.</li> </ul> <p>After the session, he called the Arabic coordinator to questioned the researcher, I and the Coordinator met the primary SENCO in the corridor. Now everyone knows the researcher.</p> <ul style="list-style-type: none"> <li>➤ (S2) is included but without any accommodation or modification.</li> <li>➤ He treated as the group of students with low level ability</li> </ul>	<p>Shadow teacher has habit not nice but it tells that she is nervous or tending to move but she blocked because of the student(S2).</p> <p><b>Miscoordination among the admin and staff</b></p> <p>ALN commented on the Arabic teacher reaction, she mentioned that there are processes must go through.</p> <p>Grade 6 belonging to the secondary administration but they located on the primary PYP building. All subjects taught using Arabic as Islamic, Arabic, Social studies are belonging to the PYP primary. She continued that no one emailed her about the corner (researcher) issue, also the Arabic teachers weren't informed about the newcomer (researcher).</p> <p>(S2) exposed to bullying from his group classmates</p> <ul style="list-style-type: none"> <li>➤ (S2) is an absent member in Arabic session. His peers group members, are not gentle and not kind.</li> </ul> <p>(S2) doesn't know anything!</p> <p>(S2) doesn't know to do anything"</p> <p>Of!</p> <p>NOTE!</p>
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<p>family negligence.</p> <p>NO students' BOOK FROM MOE until now.</p> <p>Teacher using worksheets only.</p> <p>This session was boring 100% for (S2) because of traditional teaching style. Because, teacher asking, high level ability student answering. The rest of pupils are copying from the white board.</p> <p>(S2) plays with his Whale pen</p> <p>Strategy!</p> <p>Speech part memorized as AA NN TT</p> <p>تبدأ = نداء ونهجي</p> <p>أ = استقياهم في الأمر</p> <p>ت = ..... =</p> <p>I pinned the worksheets that Arabic teacher distributed to students. Arabic teacher played the song of the poem.</p> <p>He asked students to follow the singer, <b>read and listening</b></p> <p>It was confusion to (S2) to do both missions at the same time.</p> <p>He pointed on line 5, until line 11 was sang.</p> <p>It tells that was challenging him.</p> <p>He motivated and gave attention to the song because it was about UAE.</p> <p><b>NOTE!</b></p> <p>He asked students to follow the singer, read and listening</p> <p>It was confusing to (S2) to incorporate both operations at the same time. He pointed on line 5, while, line 11 was reached</p> <p>It tells that</p>	<p>➤ (S2) is an absent member in Arabic session.</p> <p>His peers group members, are not gentle and not kind.</p> <p>(S2) doesn't know anything!</p> <p>(S2) doesn't know to do anything"</p> <p><b>Off!</b></p> <p>Local students' awareness about collaboration with peers with lower ability is below the expectation in this class. They grew up in this school which encourage the cooperative and positive communication. They are in grade 6, that I expect to see cooperation amongst students.</p> <p>ماهي الخطأ الفردية التي تلمي احتياجات الطالب (س)؟</p> <p>أين التعليم التمايزي؟</p> <p>أين الأكو موديشن؟</p> <p>أين الموديفيكيشن في المنهج والاختبارات؟</p> <p>هل له اختبارات خاصة؟</p> <p>هل يعامله الأستاذ كطالب ضعيف في اللغة أم ضعيف له احتياجات فردية مختلفة؟</p>
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<p><b>ALN/ Narrative story Writing – pre wiring</b></p> <ul style="list-style-type: none"> <li>• Additional Learning Needs is for SEND while EAL is for English as Additional Language learners who need to strengthen their language only (SENCO claimed)</li> <li>• The ALN teacher who claimed that all students are mixed in the same session currently</li> </ul> <p>session before lunch break</p> <p>Graphic organizer</p> <p>(S2) setting in a group in U shape with another 6 students.</p> <p>In this room, there are</p> <p>Computers,</p> <p>Active ball games</p> <p>Visual (Smart Screen)</p> <p>(S2) trying as much as he can to read the slide.</p> <p><b>NOTE!</b></p> <p>S2 is engaged with ALN teacher, I never heard his voice out of this room, but here with ALN teacher he is interacting with her positively.</p> <p>Each student has to read a page from the story.</p> <p>When (S2) turned to read, I was shocked <b>الله</b> he read fluently but like the robot, without expression.</p> <p>Step1# putting ideas</p> <p>Step2# fill the boxes (graphic organizer)</p> <p>Step 3# retell your own story</p> <p>Step 4# rewrite the story</p> <p><b>The ALN wrap up the session by revision of the timetables.</b></p>	<p><b>NOTE!</b></p> <p><b>Drama is an attractive way to keep his attention.</b></p> <p>sometimes, the shadow is not friendly and he is working alone.</p>  <p>Sh</p>
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• L1 Arabic and L2 English		
Grade 6 (secondary)	Setting: Private school (general classroom at back& at ALN room)	
Case: S2		
Day 1: Sunday (absent) Day 2: Monday (absent) Day 3: Wednesday Time in :8:15 am MATH Time Out: 01:55pm	Population:23	
Descriptive Field Notes	Reflective Field Notes / development	
<p>Math</p> <ul style="list-style-type: none"><li>- Long division</li><li>- Modeling</li><li>- Rounding discussing</li><li>- Using white board</li></ul> <p>PE</p> <p>PE leader praised (S2). he said" He is very good, no need for shadow, he has few friends" but he became social.</p> <p>I observe: His gross motor skill is normal and balanced; however, he has difficulty to grasp to ball, but that was effective training for balance and sensory motor skill. Also, he was enthusiastic and motivated, but he was lonely most of times.</p> <p>I have turned back to ALN ( it was sunny and hot)</p> <p>S2) as I observed he is interacted very well in PE. He asked to bounce the ball, he couldn't manage the grab of the ball.</p> <p>His gross motor skill development seems to be normal. His sensory motor skills. In the same day, I observed him over the writing task when he was writing. He holds the pencil with difficulties, suffering, press strongly on the thumb. I think the sensory motor skill needs to be strengthen.</p>	<p>!</p> <p><b>NOTE!</b></p> <p>(S2) as I observed he is interacted very well in PE. He asked to bounce the ball, he couldn't manage the grab of the ball. His gross motor skill development seems to be normal. His sensory motor skills. In the same day, I observed him over the writing task when he was writing. He holds the pencil with difficulties, suffering, press strongly on the thumb. I think the sensory motor skill needs to be strengthen.</p> <p>He was really motivated to learn.</p> <p>Visual aid (picture on the Smart screen)</p> <p>Teacher explained the grammar, then played a song</p> <p>He was moving his lips; he show up that he is singing with the song. I didn't direct a question for him, he was willing to answer every time she asked.</p> <p>The strong , bare folk, skinny man on the sky , colorful metal boat.</p>	
<p>Grammar lesson 10:20 am</p> <p>The expanded noun phrases</p>		

<p>noun+ adjectives &amp; proposition</p> <p>Teacher called all students to set on the carpet</p> <p>Expanded noun phrase to give a reader a visual picture of the noun (S2) was fully motivated and engaged to the lesson because</p> <ul style="list-style-type: none"> <li>- sets on the carpet</li> </ul> <p>Teacher gives students puzzle, where students should look after that person (the man smiling)</p> <ul style="list-style-type: none"> <li>- Teacher displayed a funny picture.</li> </ul> <p>He was really motivated to learn.</p> <p>Visual aid (picture on the Smart screen)</p> <p>Teacher explained the grammar, then played a song</p> <p>He was moving his lips; he show up that he is singing with the song. T didn't direct a question for him, he was willing to answer every time she asked.</p> <p>The strong , bare folk, skinny man on the sky , colorful metal boat.</p> <p><b>Arabic session 11:00 am</b></p> <p>(S2) forgot his booklet, his teacher gave him a copy.</p> <p>Students spent 5 minutes, listening to the song about Glory UAE.</p> <p>Students should be given listen carefully to do comprehension worksheet that based on the song.</p> <p>After 5 minutes, Arabic teacher style pose questions, students responding individually or after group discussion.</p> <p>Step 1: he asked: "What does a poet tell in this poem? Or match the sentence from the poem to vocabulary in your work book.</p> <p>Step 2: while students give answers, the other copy.</p> <p>Step 3: displayed the slides (teacher write the answers or volunteers from students) other copy answers</p> <p>S2 was copying the answers from the white board without any participation. There was no sign that he engaged. He was only copying with no attempt to answer, he was lost when he was looking for the sentence. He needs longer</p>	<p>Arabic: My question is : where is the accommodation / modification? (S2) only what (S2) doing in this session is copying.</p> <p>My question is : where is the accommodation / modification?</p> <p>My question is : where is the accommodation / modification? In this session, I and ALN had a friendly conversation about the IEP for S1 &amp; S2. It addressed sensitive points that I cannot mention in my paper.</p> <ol style="list-style-type: none"> <li>1. Who design the IEP? ALN, reported that she and classroom teacher and SENCO design the IEP while parents invited to discuss the IEP then to get their consent. She continued that usually, the IEP revised at the end of each term, for example, in December we have the meeting with who mentioned before and parents, if all agreed that goals were achieved, so, we all approved it then establish new IEP.</li> <li>2. Always I have the evident. ( POST REVISED AGREED)</li> <li>3. But this year, SENCO decided to change the format of IEP, so she didn't inform me with her new IEP design. SENCO said: the IPE will cancelled.</li> <li>4. ALN negotiated with Secondary SENCO, that S1 and S2 are SEND who should have their own IEP but nothing yet ( in next term in February, I asked ALN" Did she give her new style of the IEP, ALN: yes in February.</li> <li>5. ALN said:" S1 and S2 need attention as there some issues should be resolved. For example, they are depending on the shadow completely while their</li> </ol>
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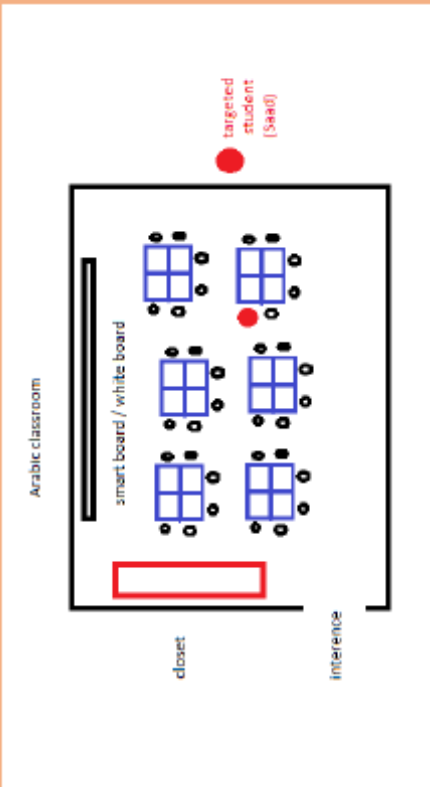
<p>time to find the targeted line because he is slower reader. Also, I observed him put his emotion in doodling on his hand, uniform, desk wherever.</p> <p>Teacher asked them to memorize the 7 lines of the poem, where he will assess students in writing the memorized lines of the poem.</p> <p><b>ALN session 11:40 am</b></p> <p>He pulled out so he missed to complete his task (compose expanded noun phrase?????)</p> <p><b>Note!</b></p> <p>After Arabic lesson he became nervous and off-task with ALN. he was busy with coloring boxes, but he was participating confidently and try his best to share his answers where they mostly accurate.</p> <p><b>ALN asks: What is the title?</b></p> <p>He raised his hand, then he said "I forgot! but he given time, then he read it efficiently."</p> <p><b>No attention</b></p> <p>In spite of that writing is challenged but he was using his pen to color and draw to slow down.</p> <p>ALN displayed a story "SHARLOT DAN", then S2 was engaged and focused and participated positively. his answers were accurate.</p> <p><b>Science lesson,</b> Digestive system</p> <p>S2 is included in science, he was daydreaming during the lesson, while the shadow was writing the outlines of the lesson (key points)</p> <p>Teacher wrap up</p> <p>During the wrap up activity, S2 was playing with his eye glasses. Teacher was talking too much. He was staring on the board to copy the answers to his worksheet. Once he wears his glasses, he started working with peers and the</p>	<p>shadow teachers design the objectives and plans randomly. (It was noticed that they are not specialist in SEND education but they build their experience based on practice. During researcher and shadow Tas, they mentioned that their, major isn't SEND or in Education, however, they did great job with both students, their answers proved that they don't have the unqualified to support SEND</p> <p>6. ALN said:" the previous SENCO in primary has some trouble management in coordinating with families.</p> <p>7. Researcher reflection: The best example of miscoordination that the deputy and the Upper primary of primary school didn't meet with Arabic coordinator and teachers to get their permission and to introduce the corner. They shocked when they see the researcher and once, Arabic teacher asked the researcher to get a way.</p> <p>8. <b>I need school structure chart</b></p> <p>Poor Coordination among the admin and teachers, researcher and other.</p> <p><b>Friendly conversation with shadow teachers (TA 1 &amp; TA 2)</b></p> <p>Researcher asked: are S1 &amp; S2 has modified assessment (exam) or expected in some assessments?</p> <p><b>Shadow responded:" No exception for S1 and S2 in language, Math and science tests.</b></p>
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<p>copy the answers from shadow teacher rather than glossary. ( <b>NOTE</b> <b>DEPENDABLE</b>) They collected the booklets. At that session, I left the group and sat at the back because students were distracted, looking at me every second.</p> <p><b>DT/ Design</b></p> <p>Designing and Technology Lesson objective: To build and model the scaffolding structure for their sky tower.</p> <p>Each group members have roles. My aim: to observe his sensory motor skills in activity</p> <ul style="list-style-type: none"> <li>• He was collaborative and motivated.</li> <li>• He played an engineer role who should explain to other groups engineers "what did they do/ how did they build and construct the scaffolding of this tower!.</li> <li>• He did it in difficult way, but his teacher kept reinforcing him and push him further to do it.</li> <li>• It was only that I see him Confident, speaks, collaborates, responding to all, moving and using motor &amp; sensory skills efficiently.</li> </ul> <p><b>Moral education</b></p> <ul style="list-style-type: none"> <li>• S2 included with shadow.</li> <li>• Terms: self-esteem, responsibility, teacher used old teaching style</li> <li>• It was a lecture where all students were not motivated.</li> <li>• Worksheet should be done. He asked his peer to handing him a pencil, she responded with bullying him.</li> <li>• Shadow teacher explained to him in one-one chatting.</li> <li>• There was a survey distributed to children, he challenged with reading. He loses the lines of the answer.</li> <li>• Shadow teacher pointing on each single line</li> <li>• Teacher gave him extra time to do the task.</li> <li>• He was lazy and depending on peers and shadow too much.</li> </ul>	<p>S1 is yet not masters the primary multiplication while S2 can do long division. This statement agreed from Classroom teacher of S2 in interview</p> <p>It was very clear that S2 remove and put his eye glasses when he confused or lose his attention or escaping from doing the task by himself.</p> <p>I integrated with him in friendly conversation</p>
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Grade 6 (secondary)	Setting: Private school (general classroom at back & at ALN room)		
Case: 5 October 24 /2020			
Day 4: Thursday 29 Oct/2019	Population:23		
Time in :8:15 am			
Time Out: 01:55pm			
Descriptive Field Notes	Reflective Field Notes / development		
<p><b>Arabic Lesson</b> (Grammar lesson) parts of speech (Object)</p> <p>Warming up: Teacher directed a question for all students based on the slide that he presented on the screen board.</p> <p>Teacher:" What do you see?</p> <p><b>S2</b> covered one eye, trying to see what is shown on the smart screen, then he took out his eye glasses and rubbed his eyes.</p> <p>S2 so polite and calm.</p> <p>It was obvious that every Arabic lesson, you will find his mate chair is vacant! His peers are not friendly with him.</p> <ul style="list-style-type: none"> <li>Teacher explained the propositions ( in, on , behind, front ...etc)</li> </ul> <p><b>S2</b> became off-task, he became in another world, he was busy with himself while the discussion raised between students and teachers.</p> <p><b>He started day dreaming</b></p> <ul style="list-style-type: none"> <li>Teacher used the visual aids (slides, markers of different colors, the big font with color was obvious.</li> <li>Teacher after each single part of his lesson plan asking "does anyone have and inquiry or question? Do anyone need more explanation?</li> </ul>			<p><b>NOTE! Incident! ☹️</b></p> <p>On Monday Oct 28, S2 has Arabic language spelling assessment. That meant to me a lot. I went in a hurry. It was very important to attend and observe the child during the assessment. I could observe the accommodation or the modification. Any support, however, once I got into classroom, the Arabic teacher asked me to get away, out of his classroom, in front of all students.</p> <p>I told him, this is the last day to me, he said" Don't attend with us today excuse me! PLZ please, get away!</p> <p>Next day he apologized and justified his situation.</p>

<ul style="list-style-type: none"> <li>Teacher posed group activity that depending on group members' discussion.</li> </ul> <p>S2 was lonely, and very sad and off task, playing with his favorite pen which was a puppet of a whale pen.</p> <ul style="list-style-type: none"> <li>Teacher asked S2 peers on his group ignored him and lie when the teacher asked them to share the discussion with S2.</li> </ul> <p><b>NOTE!</b> Should change his seating and getting him with more collaborative peers.</p> <ul style="list-style-type: none"> <li>Comprehension: teacher presented a slide which was full of reading passages. Teacher posed a question about the Directions (right, left, front, behind. S2 couldn't answer while teacher repeated the questions several times. Once his teacher acting the question, S2 responded correctly.</li> <li>NOTE! For S2, there must be spaces between lines and bigger font and lesser amount of words to support him in aim to read. When teacher pointed on the line, S2 answered.</li> <li>Teacher play with students; S2 engaged finally and wake up. He attempted to spell, he spent efforts to read and spell but he tried.</li> </ul> <p><b>Additional Language Needs ALN ( pull-out)</b></p> <p>Today, I found that S2still unrelaxed to work while I am setting close to his desk, so I skipped some seats to let him feel comfort. ALN mentioned that his reading level is very low under his age by three years, so she decided to give him a time every session to read stories with shadow.</p> <p>So he pulled out in pull out session.</p>	<p><b>Setting in Arabic classroom:</b></p> <p>S2 sets in the back. There is a group of students where they represent a partition between him and the board.</p>  <p><b>NOTE!</b></p> <p>(S2) must approach the teacher desk and resources must be facilitated.</p> <p>What is the difference between shadow and ALN</p> <table border="1"> <tr> <th>ALN</th><th>Shadow</th></tr> <tr> <td>ALN teacher is with education specialty</td><td>Without education specialty</td></tr> <tr> <td>Teaching student with SPLd in small group ( to develop social</td><td>Teaching the student with SPLd in one-one.</td></tr> </table>	ALN	Shadow	ALN teacher is with education specialty	Without education specialty	Teaching student with SPLd in small group ( to develop social	Teaching the student with SPLd in one-one.
ALN	Shadow						
ALN teacher is with education specialty	Without education specialty						
Teaching student with SPLd in small group ( to develop social	Teaching the student with SPLd in one-one.						



<p>He read loudly. He was great. <b>When he reads his mouth become full of the saliva and the letter (s) sound is unclear.</b> Once he done his reading, he turned back again to the ALN classroom to join the group which is mixed of children with language difficulties and SEND. He engaged in this session. He motivated to discuss with ALN and his peers while the ALN teacher using visual, auditory and kinesthetic styles. She used her facial and gestures with very clear sound.</p> <p>Today, he copied from the board, he took long time to copy.</p> <p>The lesson objectives:</p> <p>To organize the ideas, organize the information</p> <p>To use accurate punctuation and spelling</p> <p>S2 interacted positively and he was confident. If I evaluate his participation, I could estimate responding, participation, listening carefully about 100% while in writing 30%</p> <p>ALN teacher used to share with her students the next lesson plan and objectives in aim to give them confident and keep their attention.</p> <p>There was a big word game, where he should circle the words in spelling test that he took.</p> <p>NOTE!</p> <p>He was challenged because he couldn't able to find the words in crowded page of words. He couldn't able to see, but he found 4 words (get, no, for, the) The shadow helped him so he got ( going, DAD) After 20 minutes , he started being interactive with the activity .</p> <p><b>Math : Division</b></p> <p>I observed effective strategy that applied by teacher.</p> <ul style="list-style-type: none"> <li>• She reviewed the division with all classroom.</li> <li>• She recorded the math problem ( division) on the board</li> <li>• All students try to solve it</li> </ul>	<table border="1"> <tr> <td data-bbox="245 607 531 1014"> <p>skills and confident to interact with peers)</p> <p>Setting: in independent classroom that provided with all resources as technology devices, internet, printer, smart screen and reading library and reading corner, computers etc.</p> </td><td data-bbox="245 203 531 607"> <p>The focus only on targeted child.</p> <p>No particular private space.</p> <p>Following the student during all lessons using English but not in Arabic</p> </td></tr> <tr> <td data-bbox="531 607 703 1014"> <p>Both of them listen, monitor his reading and posing question (comprehension)</p> </td><td data-bbox="531 203 703 607"> <p>S2 shadow is not well-skilled.</p> <p>She is getting angry quickly with him</p> </td></tr> </table> <p>NOTE :</p> <p>The targeted student is pulled out in one-one within pull-out session with ALN teacher because he is with SEND while the others with learning difficulties , though are different.</p>	<p>skills and confident to interact with peers)</p> <p>Setting: in independent classroom that provided with all resources as technology devices, internet, printer, smart screen and reading library and reading corner, computers etc.</p>	<p>The focus only on targeted child.</p> <p>No particular private space.</p> <p>Following the student during all lessons using English but not in Arabic</p>	<p>Both of them listen, monitor his reading and posing question (comprehension)</p>	<p>S2 shadow is not well-skilled.</p> <p>She is getting angry quickly with him</p>
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<p>Both of them listen, monitor his reading and posing question (comprehension)</p>	<p>S2 shadow is not well-skilled.</p> <p>She is getting angry quickly with him</p>				

<ul style="list-style-type: none"> <li>• She walking around the students to checking if someone needs a help or support.</li> <li>• Step 1 she writes math problem / students copy it</li> <li>• Step 2 students attempt to do it independently.</li> <li>• Step 3 she jumping around and checking to support struggled individuals.</li> <li>• Step 4 she will model it with student's participation in front of all students.</li> <li>• Step 5 she call a small group of students with homogenous ability level ( one by one ) to the carpet and focuses on their gaps and engaged them to do it. She facilitates the task for each single student.</li> </ul> <p>NOTE! While students do 3 questions, he was stuck on the 1<sup>st</sup> one. He took time and his shadow was killing herself to accelerate him but that doesn't work. He struggled with subtraction.</p> <p>NOTE! S2 motivated to do math, he tried several strategies that his teacher taught him. He draws tally but didn't get it. He tried again another strategy until he got it right.</p> <p>Shadow suggests to use his own white board to do the short operations, he do it and finish the 1<sup>st</sup> question. Note ! he needs more time than peers.</p> <p>NOTE! His shadow all the time is angry <b>DICTION TEST</b> Step1 : the vocabulary test is repeated until he got 18/20 . Step 2: each word is shown and he should try to spell it then write it in his board. Step3: I conducted the spelling test, he got low scores He left to be independent no shadow.</p>	
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<p>I have been asked to give him the test.  She was shocked!  She showed me his previous tests:  October 10<sup>th</sup> 9/20  October 17 15/20  October 24 10/20 (where his shadow was not attending it with him)</p> <p>She said, I used to say the word and remind him the sentences in the context that we used the word in it. he needs clause</p> <p>After breaktime  Guided reading with ALN (pull-out session)  She warming up her students with playing a game  Step 1 # there is a table of vocabulary (words)  Step 2# students should read  They stand up in circle, every player should read one word to pass the ball for next player.  He was engaged and read</p>	
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## Appendix 11 Evaluations Student 1

### General English class teacher evaluation (term 1)

[Redacted] levels in English and Maths are

Sept 2019

English reading yr 1 - Writing Working at grade 1

2020 Feb

English reading yr 2 - writing level working towards grade 2

### Arabic language teacher evaluation (term 1)

- At the beginning of the year was 12%100
- At the middle of the year was 58 %100
- At the end of the year was 64 %100

😊 Type a message
📎 📷 🎤

درجة أول العام كانت 12 من  
 100 وفي منتصف الفصل كانت 58  
 من 100 وفي نهاية الفصل كانت 64  
 من 100

😊 Type a message
📎 📷 🎤

## Appendix 12 Evaluations Student 2

### General English class teacher evaluation (term 1)

I have read through your notes. I give you permission and I am happy for you to use them, I feel they give a true transcript of our conversation.

With regards to the data you needed for [REDACTED] I have not forgotten but his test results are a little complicated.

I feel [REDACTED] is still making some progress but not as much as he did last term. This term his progress has slowed a lot because of some changes we have noticed in him. He is now very tired at school and does not listen well or stay focused in his lessons. Both myself and [REDACTED] (his shadow) have mentioned this to his parents. In particular when we completed the written assessments he was writing down answers without even reading the questions not caring if his answer was incorrect.

Unfortunately, because of this the data, from the end of last term to now there is very little improvement. This is not usual and I would hope if he regains his focus we will see his data improve.

I am sorry if this is not helpful to you for your research but feel I must be honest with you.

### Arabic language teacher evaluation (term 1)

#### Student (2) grades in Arabic from Term 1

- At the beginning of Term 1,  
Diagnoses assessment :  
8/100
- At the middle of Term 1:  
18/100
- At the end of the term :  
50/100

السلام عليكم  
درجة الاختبار التشخيصي : 8 من 100  
درجة منتصف الفصل : 18 من 100  
درجة نهاية الفصل : 50 من 100  
وشكراً

## **Appendix 13 Interview Questionnaires**

### **English Classroom Teacher Qualitative Interview Questions**

1. It's nice to meet you and get all these experiences, great and worthwhile observations. Can you introduce yourself before you start?
2. Do you think inclusive education is one of the solutions to support the academic and overall development of students with special needs?
3. Do you agree to have inclusive classroom when the students are EAL or they are speaking English as a second language?
4. How do you know that you have students with special needs in your classroom?
5. Is there an individualized educational plan (IEP) for these students? How are they created and assessed?
6. Are the parents involved?
7. Do you plan regarding his needs and so on? Are there any modifications or accommodations?
8. Regarding shadow teachers, did you agree to have a shadow teacher in the class? In the case where a student also has pull-out sessions, what if only one provision was given, which do you think is more effective?
9. What do you think if the shadow is bilingual, speaking Arabic and English? Do you think it could be of benefit or not?
10. What is the difference between British curriculum and the PYP?
11. Is there a different approach to student support between primary and secondary schools?
12. Is the curriculum designed for students as English native speakers or ESL?
13. Regarding assessments, are these students included within the general classroom? Are there assessment modifications?
14. What is your point of view about teacher training? Do you have specific qualifications for working with dyslexic students?
15. Do you think there is sufficient collaboration between English and Arabic classroom teachers, and the administration/coordinators?
16. What are the challenges you face during inclusive classes where English is the dominant language?
17. What do you think about the local culture, or mindset about special needs?
18. What are your recommendations to support an inclusive setting in subjects taught in English, which is a second language for many students here?

### **SENCO Qualitative Interview Questions**

1. It's nice to meet you and get all these experiences, great and worthwhile observations. Can you introduce yourself before you start?
2. How are classroom teachers informed about SEND learners within their classroom?
3. What are the education services for targeted students?
4. What do you think about the parents' role?
5. Who are the individuals who participate in designing the individualized educational plan (IEP)? Are revisions done by the same group?
6. Some have said that students in the secondary stage must be given reduced educational services, because they must be more independent. What do you think?
7. Is there differentiation between students with weaknesses because they are working in a foreign language, or because they have special disabilities? Are they differentiated in this service?
8. If you compare provisions between English and Arabic subjects, there is no comparison as they are lacking in Arabic. What do you think is the issue?
9. Do you think if we strengthen students in their mother tongue that will help support them in the second language?
10. How is the coordination between primary and secondary regarding SEN students? Is there coordination between English and Arabic departments?
11. What are your recommendations to provide for the needs of Arabic learners with specific learning difficulties within an ESL school?

### **ALN/TA Qualitative Interview Questions**

1. It's nice to meet you and get all these experiences, great and worthwhile observations. Can you introduce yourself before you start?
2. What is your role?
3. What is the situation with the transition year, and how has it been problematic for SEN students?
4. How are students having additional needs in class identified?
5. Once you have a diagnostic report, what is the next step? What is the provision?
6. How many times do you revise and review the IEP and provisions?
7. Do you believe in the parents' role? There is a statement which says parents play a crucial role in the achievement of an IEP.
8. Did you receive any training in this setting, which helps you, supports you to be able to create an IEP, to provide students with a specific, particular intervention that they need?
9. What are the educational services for the students observed in this research? Are there specific accommodations or modifications? Are the tests the same?
10. When you compare the provisions for students in English classes they are excellent, sophisticated; but what is provided for them in the Arabic section, it is like they are not in the same school. What is the issue, do you think?
11. If there was integration between the Arabic and English departments, do you think this would be of benefit? Would raise awareness?
12. If we strengthen SEND students who have dyslexia in their mother language, would this reinforce them in the second language?
13. What are your recommendations to have more effective provisions for these students, or for others with specific learning difficulties like dyslexia?



### **1:1 Support Assistant Qualitative Interview Questions**

1. It's nice to meet you and get all these experiences, great and worthwhile observations. Can you introduce yourself before you start?
2. How many years have you been supporting students with special needs?
3. What are the challenges faced by the target student in subjects taught in English (L2)?
4. Do you think he has similar difficulties in subjects taught by using Arabic (L1)?
5. What does the target student need to be supported within the inclusive classroom?
6. To what extent are there educational services provisions in the school to support SEND learners with dyslexia in both English and Arabic subjects?
7. Does the inclusive classroom support the student to strengthen his academic achievements?
8. Who assesses the target student after each lesson, the shadow teacher or classroom teacher or both?
9. Do you have suggestions to get the best inclusive environment for native Arabic learners with learning disabilities?

### **Arabic Coordinator Qualitative Interview Questions**

1. It's nice to meet you and get all these experiences, great and worthwhile observations. Can you introduce yourself before you start?
2. Can you discuss your experience?
3. Do you agree with the following statement: "Our school is a role model of inclusive education"?
4. Are the Arabic language classes running in the same general school inclusion system?
5. As the Arabic Coordinator, how are teachers informed about special cases with SEND?
6. How do you create the IEP?
7. Is the plan a general plan created for all students with weaknesses, or is there a different IEP for SEN students?
8. Is there modification or accommodation in Arabic subjects to support SEN students to meet their potential?
9. Do you see a distinction between a student with weaknesses because of some reasons such as poor care, etc., and one who has weaknesses because of SEN?
10. Does coordination between the administration and your teaching staff need more reinforcement?
11. Do you receive workshops in respect to inclusive education for SpLD students?
12. What is your evaluation of each element which could affect inclusive education and play a role in making inclusion effective and successful?
13. Do you have a message for parents/guardians of SEN students?
14. What about the role of the administration staff, is it important?
15. Do you think the idea of inclusive education is a recent one in our culture (the Middle East)?
16. If the student's shadow teacher doesn't speak Arabic, how can she support the child during Arabic classes? Who is monitoring the support teacher?
17. What about pull-out sessions, are they useful?
18. What is your last message and recommendations for providing the best inclusive education?

### **Arabic Teacher Qualitative Interview Questions**

1. It's nice to meet you and get all these experiences, great and worthwhile observations. Can you introduce yourself before you start?
2. Do you agree with the idea of inclusive education?
3. Is inclusive education applied in this environment?
4. Do you agree with this statement: "integration is not inclusion"?
5. How are you informed about SEN students who need support and educational services, and when?
6. Is cooperation between the administration and the Arabic language team supportive of the teacher and student?
7. Can you distinguish between a student's academic weakness, and weakness due to a disability or cognitive disability such as learning disabilities?
8. How were you informed about the target student with SEN in your classroom? When?
9. What are the most important challenges and difficulties faced by the target student, in your experience? How do you overcome these challenges?
10. What are the target student's strengths?
11. Have you received any workshops in this regard?
12. What is the role of management in order to effectively support people of determination?
13. Are there individual exceptions that take into account the needs of special cases, such as accommodations and modifications?
14. Do you think academic achievement of the student in the first language (Arabic) is necessary for his progress in the second language (English)?
15. Does the target student need a special support teacher as shadow or pull-out sessions? Which is more effective?
16. Do you think exchanging experiences and cooperation between Arab and foreign teachers might support students with special needs in inclusive education?
17. What are the obstacles that are faced by Arabic language teachers within an inclusive environment?
18. What are your recommendations to effectively support inclusive education in a school environment in which English is dominant?

### **Parent Qualitative Interview Questions**

1. When did you enroll your child in the current school?
2. When did you discover that your child needs support?
3. What were the symptoms or signs of this issue?
4. Would you mind sharing your thoughts regarding the integration of years in this school year (transition year)? What was the best choice for your child from your point of view? Why?
5. Do you think educational services provisions to support the child are necessary for your child in subjects taught by English and Arabic languages?
6. Did you know about SEN or dyslexia before?
7. What are your child's strengths and weaknesses?
8. Does this school have a program to guide parents of children with SEN, such as workshops, to promote your knowledge of dyslexia?
9. How is the communication and collaboration performance with school stakeholders to support your child? How has that happened?
10. Are you invited by the school to monitor your child's academic development?
11. What are the educational services provided by the school to support your child?
12. Does the child receive educational services provisions in English, math and science?
13. Do you know your child's IEP and any accommodations or modifications in curricula and assessment?
14. Are you satisfied with provisions in English? Why?
15. To what extent are there services to support your child? Which area?
16. Does your child show academic progress? Which area, and why do you think so?
17. Does your child have provisions in Arabic?
18. Are you satisfied with services provided in the Arabic section?
19. Did this school have efficient evaluation for your child based on his individual needs?
20. Is your child supported in Arabic subjects the same as he is supported in subjects taught in English? How?
21. Do you think supporting your child with dyslexia in L1 could develop his L2?
22. Are educational services and provisions equivalent in both subjects, English and Arabic?
23. Are you satisfied with the Academic coordinator (SENCO)?
24. Are you satisfied with school departments, both English and Arabic?
25. What are your recommendations or suggestions to provide effective educational services in both English and Arabic?