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**The Effect of Developmental Difficulties on Educational Achievement and the Role of  
Adaptive Education in Fostering and Addressing Learning Disabilities**

*The Case of ASLAOUI MOHAMMED Primary School Mecheria - Naama*

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**Dissertation Submitted to the Department of English as a Partial Fulfillment for  
the Degree of Master in Linguistics**

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## **Statement of Originality**

We, the students Khawla ABED and Inas MORDI , hereby declare that our master thesis entitled, “The Extent To Which Developmental Difficulties Affect Educational Achievement And The Role Of Adapted Education In Fostering And Addressing Learning Disabilities, The case of pupils’ at the primary school of ASLAOUI MOHAMED in Naama” is entirely our own work and that we have written it in our own words, it contains no material that has been submitted previously, for the award of any other academic degree or diploma except where otherwise indicated. We also confirm that the present work contains no plagiarism and that any information taken from published or unpublished sources has been acknowledged.

## *Dedication*

To our pillars of strength, our unwavering support systems, and the beating hearts of our lives,

*To our parents*, who have sacrificed so much to provide us with opportunities.

*To our siblings*, who stand as our lifelong companions and confidants.

*To our extended family*, whose collective wisdom and warmth have enriched our lives in countless ways.

*To our dear friends*, to the one who's been more than a friend, who's been our confidant.

*Mordī Ines*

*&*

*Abed Khawla*

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## **Abstract**

Education is the cornerstone of enhancing individuals' knowledge and skills to contribute to society. However, limited knowledge exists concerning the educational experiences that children with Learning Disabilities face. Diving into the depth of learning disabilities, this study aims to explore the impact of developmental disabilities on academic achievements, including a clear understanding of the adaptive education system, its contributions in educational settings, and the responsibilities served by teachers. Another focal point of this study is to recognize the terminology of integration and its crucial aspects. Furthermore, the research design incorporated a variety of data gathering methods, including classroom observation, questionnaires designed for teachers and parents, and interviews with teachers to explore the effectiveness of adaptive education and the strategies used on learners' behaviors. The findings indicate that Developmental Impairments have a serious impact on a child's success, resulting in challenges in the process of learning and teaching. Moreover, the Adaptive educational system does not inquire about its specific requirements and necessities, thus affecting teachers' ability and teaching effectiveness in meeting diverse pupils' needs.

**Key words:** Developmental disabilities, Learning disabilities, Academic achievement, Adaptive education, Integration.

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## **List of Abbreviations and Acronyms**

**ADHD:** Attention Deficit Hyperactivity Disorder

**CRPD:** The Convention on the Rights of Persons with Disabilities

**DSM:** Diagnostics Statistical Manual

**IQ :** The Intelligence Quotient

**ITPA :** Illinois Test of Psycholinguistic Abilities

**LDs :** Learning Disabilities

**MM :** Mixed Methods

**NACHC :** The National Advisory Committee on Handicapped Children's

**NI :** repetitions

**QUAI:** Qualitative

**QUAn:** Quantitative

**RTI :** The Response To Intervention

**SLD :** Special Learning Disabilities

**SpLDs :** Specific Learning Disorders

**US :** United states

**% :** percent

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**General**

**Introduction**

## **General Introduction**

Nowadays, the study of childhood in its various aspects has become one of the most important studies that have received great attention by experts and scholars of education, psychology, and sociology, due to the importance of childhood in society, as it shapes and increases its development and civilisation. Over the years, research and science have made efforts to devote their expertise and experiences to provide models and assistance in various fields to boost and improve the healthy development of children in families and schools by creating or including children in primary schools, which is called the basic stage because it is the foundation of everything, which in turn is the most important stage in building a competent and responsible individual to contribute the advancement of society.

In addition, schools provide students with all the conditions to adapt to them, in order to build the personality and intellect of the student and develop his various skills by discovering various things such as writing, reading, arithmetic, and various activities that develop his intellectual and mental skills, and from this point of view there are some or categories of students suffering from learning difficulties. These difficulties may be related to various disabilities, including developmental disabilities that lie in the mind and cause poor perception and attention, some problems in remembering and memorising, and distractibility, and academic disabilities such as persistent reading, writing and mental arithmetic difficulties. All of this affects the child's psyche, such as loss of confidence, a sense of constant failure, lack of desire to learn, and failure in learning. Therefore, the concerned and responsible authorities must develop a plan to treat these categories of students and take care of them in all respects, by creating educational and pedagogical alternatives that alleviate these issues and difficulties by providing methods and means of educational support. This is all about adapted education, which in turn takes care of all groups who suffer from mental or other difficulties and tries to treat them to catch up with the years of delay and reintegrate them back into regular classes.

In the field of education in Algeria, addressing LDs has become increasingly important. Therefore, this study aims to explore LDs in a wider scope by investigating how pupils with developmental disabilities can achieve academic integration. Additionally, it seeks to examine how teachers manage the challenges faced in the adapted classroom while approaching the adaptive educational system from different angles.

The objectives behind this research are to bring attention to individuals facing LDs and to provide insights to educators, healthcare professionals, and society. By disseminating the findings of this study to stakeholders, we aim to prompt informed decisions and appropriate actions.

This research aims to provide an in-depth study of what LDs are , and how adapted education can deal with them through:

- Focusing on developmental disabilities that have a significant impact on the student's academic progress and achievement from the point of view of researchers.

- Recognise the role of the adapted education teacher and his/her role in assisting and monitoring students with disabilities.

- Focusing more on adapted education and its role in taking care of students with disabilities and what it provides in terms of tools and guides to help the teacher do his or her job, as well as creating opportunities for school integration, as well as addressing the psychological aspect of the student and preparing him for social integration.

Students with developmental disabilities such as attention deficit, poor memory, and distraction face significant challenges that hinder their academic progress and achievement. These developmental disabilities not only impact their educational performance but also affect their psychological well-being and social integration. There is a critical need to explore how adapted education in Algeria exactly in the region of Naama can effectively address these issues by providing specialized tools, resources, and strategies for teachers. Furthermore, this research seeks to investigate how these developmental disabilities affect the children's academic achievement and how the Adaptive education can better support students with learning disabilities, enhance their academic success, and prepare them for successful social integration within mainstream school environments.

From this, the following study question was posed :

- Is academic success achievable for children with LDs when provided them with appropriate support and guidance of adaptive education ?

Hence , To explore this question in greater detail and provide a comprehensive answer, several sub-questions have been formulated:

- 1- Could pupils with developmental disabilities have the chance to get integrated into the normal classes in educational system ?
- 2- Is the teacher of adaptive education well qualified and has a full background about this kind of education ?
- 3- Are children with LDs sufficiently supported by adaptive education?

In order to answer this sub-questions the following sub-hypotheses were constructed:

- 1- The majority of pupils of developmental disabilities have a chance to be integrated again in normal classes.
- 2- In most cases the teacher of adapted education has a full information and strategies to support and deals with this category of pupils.
- 3- The implimentation of adaptive education positivly impact the academic success and change in academic skills of pupils with learning disabilities.

From these sub-hypotheses, a general hypothesis for the general question was constructed.

- Perhaps this category of pupils can achieve success after getting a good support in adaptive classes.

This study holds significant importance as it addresses the challenges faced by students with developmental disabilities such as attention deficit, poor memory, and distraction. These disabilities profoundly impact negatively not only the academic performance of these students but also their psychological well-being and social integration. By focusing on the region of Naama in Algeria. Moreover, the findings of this study have the potential to enhance academic success and facilitate better social integration for students with developmental disabilities.

Based on this, the study aims to know the impact of developmental difficulties on the academic achievement and the role of adapted education in dealing with these categories of students. This research was done by dividing it into two chapters, one chapter includes the theoretical aspect and previous studies in this field and the second chapter is the methodological aspect in which the mixed methods was used to collect and analyse information in order to reach data to evaluate the hypotheses proposed by the researchers.

The theoretical chapter included some concepts related to the field of research, which are related to developmental and academic learning difficulties and their types, with a section on the historical aspect and how to diagnose and the causes of these difficulties in a brief

manner, in addition to what is adapted education and its role in treating children with difficulties.

As for the methodological chapter, researchers used the mixed method of data collection in addition to the triangulation method of data collection due to the small sample size and to achieve the effectiveness and validity of the research in all respects. Therefore, researchers prepared a structured interview with the teachers of the adaptive education and asked them similar questions, questionnaires were also distributed to teachers and parents. Researchers supported their information with a comprehensive observation of the third and fourth years of primary education at Aslaoui Mohammed School in Mecheria over a period of weeks in order to obtain accurate information to help us verify our hypotheses as researchers. In addition to the third instrument which is the questionnaire addressed for both teachers and parents for information diversity, quality and credibility in research, following our collecting data with a detailed analysis to discuss finally the findings in order to reach recommendations and suggestions can benefit this categories of pupils in future.

# Chapter One

## **Literature Review**

# **Chapter One**

## **Literature Review**

- 1.1. Introduction**
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# Chapter One

## Literature Review

### 1.1 Introduction

Providing a better understanding of learning disabilities (henceforth LDs) is crucial. This chapter discusses a comprehensive theoretical framework for LDs, the challenges they pose, and the cognitive difficulties that affect various areas such as reading, writing, mathematics, and social skills. It delves into the definitions of LDs provided by previous scholars, highlighting key developments in how these disabilities have been understood over time. The chapter sheds light on the distinctions between developmental and academic disabilities. Furthermore, it examines the types of intellectual disabilities and their common features, as well as the methods for diagnosing LDs. The chapter also explores the causes affecting people's abilities. Moreover, this review aims to provide a comprehensive understanding of adaptive education to help individuals navigate educational systems effectively.

### 1.2 Learning disabilities

Education is a wide field, and with its sub-concepts, learning plays a salient role in providing individuals with all means to pursue quality lives. However, the educational system deals with the examination of the learning levels of the students and tries to find all the solutions that can facilitate the learning process because it becomes evident that not all students can achieve the necessary level of success or can get a high quality of education. **Bacanli** (2015) states that schools become the best and most effective source of learning and acquiring knowledge. But some students cannot show the best performance in learning like others in the classroom and fail to achieve certain levels of success and gain a good result. Although any child or student is likely to be successful in his or her academic studies if he or she does not have any problems of learning related to his or her cognitive, social, visual, audial, or behavioural abilities that can hinder his or her studies, there are also some children who fail at school because they have some specific learning disabilities.

According to **Barth** (2007), students who have some specific learning disabilities are the ones who cannot acquire much knowledge in a normal way. **Bateman** (1965) described children with learning disabilities as “**the children who have significant differences between the expected success of their mental potential and their current school**”

**success.”** A disability in general is considered as a barrier that hinders the learning processes, such as the acquisition of knowledge and language skills. LDs is a worldwide term that describes a heterogeneous group of disorders that impede the natural acquisition of skills in children, making this process very difficult or causing it to proceed at a slower pace compared to typical development (Hammill, 1981). Specific Learning Disorders (SpLDs), also termed learning disorders and academic skill disorders, are neurodevelopmental conditions that impede a child's learning abilities (Karande, 2008).

The American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders (DSM-5, 2013) defines specific learning disorders as challenges in applying and acquiring academic abilities. These barriers, which must last for at least six months, may include slow reading, comprehension issues, writing difficulties, mathematics difficulties, and spelling difficulties. Thus, learning disabilities are an inherent part of an individual and can impair his or her learning capacities and behaviors (Sattler, 1990). LDs are a very wide and complicated issue that may influence individuals, especially young learners or children in their early years of study. It is considered as varied topic related to children's psychology, psycholinguistics, and educational psychology, which connect learning with a cognitive process to allow learners to accept new knowledge and skills. Individuals with learning disabilities may have difficulties with one or more of these skills despite having average to above-average intelligence and receiving adequate instruction (Hammill, 1981).

### **1.3 Historical perspective of Learning Disabilities**

LDs have become apparent only in the 1960s and 1970s, and their origins were identified in the early 1800s and recognized as a different issue by the United States Department of Education. In this part, the history of LDs can be divided into five periods: the European foundation period (1800–1921), the U.S. foundation period (1920–1960), the emergent period (1960–1975), the solidification period (1975–1985), and the turbulent period (1985–2000).

#### **1.3.1 European Foundation Period of Learning Disabilities**

During the European foundation period from 1800 to 1920, two primary studies related to LDs, advancements in neurology, and significant studies concerning reading disabilities were published. **Gall** studied brain-injured soldiers, exploring the link between brain injury and cognitive impairment. Based on his observations, he assumed that the brain is divided into three main areas: **“an area responsible for movement and sensation, an area of moral**

**qualities, and an area of intellectual qualities”** (Head, 1926; Wiederholt, 1974). Due to this contribution, he became prominent in determining the effect of brain damage known as **Broca’s** aphasia. Similarly, **Kussmaul** introduced the concept of "word/text blindness," contributing to the understanding of specific reading disabilities, which he labelled "word-blindness." These two conditions make the patients unable to understand spoken words or read written words despite the fact that they have perfect hearing and vision and could still speak and write. **Kussmaul’s** concepts are provided to distinguish specific language comprehension and reading disabilities from other types of aphasia (Kussmaul, 1877, p: 770).

### **1.3.2 United States Foundation Period of Learning Disabilities**

From 1920 to 1960, the interest about brain-behavior and the relationships in the individuals with learning disabilities in European researchs became strong by clinicians and researchers in the United States.

This interest led to a focus on language and reading disabilities, as well as perceptual, perceptual-motor, and attention disabilities. Influential figures like **Orton**, **Fernald**, **Monroe**, and **Kirk** played key roles in building upon and expanding European work. **Orton**, notable for his work on reading disabilities, introduced descriptions and interventions, including the renowned Orton-Gillingham method. **Fernald** meticulously documented student progress, **Monroe** developed diagnostic tests, and **Kirk** refined assessment approaches, creating the Illinois Test of Psycholinguistic Abilities. Simultaneously, researchers who had migrated from Europe to the U.S., such as **Goldstein**, **Werner**, **Strauss**, **Lehtinen**, **Cruickshank**, and **Kephart**, conducted research on perceptual, perceptual-motor, and attention disabilities in adults with brain injuries. They advocated instructional accommodations and strategies for individuals with learning disabilities, emphasizing a distraction-free environment and addressing perceptual disturbances.

### **1.3.3 Emergent Period of Learning Disabilities**

Between 1960 and 1975, learning disabilities emerged and categorized in formal way. During this period, the term "learning disabilities" was introduced, the federal government joined this term in its curriculum, also, parent and professional established some organizations for learning disabilities, and the expandin of educational programming for students with learning disabilities, particularly in psychological processing and perceptual training. **Kirk** is credited with originating the term "learning disabilities" in 1963 during an address to parents of "perceptually handicapped" children.

This term became widely adopted in special education. Children with Learning Disabilities and the Association for Children with Learning Disabilities formed around this theme.

Definitions of learning disabilities varied, with **Bateman** reintroducing **Monroe's** discrepancy model in 1965. **Federal** involvement started in the early 1960s through task forces, resulting in somewhat divergent definitions. service programs was supported by The Children with Specific Learning Disabilities Act of 1969, and in 1970, Public Law 91-230 consolidated educational programs for children with disabilities. **Kirk** further refined the Illinois Test of Psycholinguistic Abilities (ITPA). During this era, remedial techniques were developed to address perceived visual and visual-motor disabilities in learning disabilities, but they were generally found to be ineffective in addressing academic problems.

#### **1.3.4 Solidification Period of Learning Disabilities**

From approximately 1975 to 1985, the field of learning disabilities experienced consistency and arrangement-building concerning its definition and methods of identification. The passage notes the significance Congress of Public Law 94-142, the Education for All Handicapped Children Act, passed in 1975, which officially recognized learning disabilities as a category authorised for financing. This period saw considerable applied research financed by the U.S. Office of Education, leading to the empirical affirmation of educational methods for students with learning disabilities.

The National Advisory Committee on Handicapped Children's (NACHC) 1968 definition of learning disabilities became broadly embarked by state departments of education and was applied by the U.S. Office of Education for Public Law 94-142. This definition is still used by The federal government, but other definitions have emerged from various groups and researchers as knowledge about learning disabilities has expanded.

In 1977, federal regulations regarding the identification of students with learning disabilities incorporated the concept of an ability-achievement discrepancy. The passage also highlights a shift from ineffective remedial techniques for visual and visual-motor disabilities to the development of educational methods for students with learning disabilities.

The U.S. Office of Education funded five research institutes focusing on different aspects of learning disabilities, and their work remains influential. Additionally, intervention programs like Direct Instruction, developed by **Engelmann, Becker**, and colleagues,

emphasized systematic teaching of language sub-skills, with studies finding Direct Instruction to be highly effective in language, reading, and mathematics.

### **1.3.5 Turbulent Period of Learning Disabilities**

During this period of LD history (1985 to 2000), the field has experienced both consolidation and challenges. Between 1976-77 and 1998-99, the number of students identified as LD increased over 2.8 million, prompting concerns about potential misdiagnoses. Despite this efforts to define LD have consolidated, with research indicating that students with LD can learn effective strategies. advancement in understanding phonological processing and the neurological basis of LD have also emerged.

Discord in the field stems from concerns about flawed identification procedures, particularly the confusion of minority students, which has sparked debate. The traditional discrepancy concept is being questioned, and alternatives are being explored. The full inclusion movement has led to tensions as parents fear inadequate services for their LD children in regular classrooms.

Additionally, the postmodernist perspective challenges traditional views, asserting that disability is a socially constructed concept. These clashes with the conventional medical model of treating disabilities, causing significant contention in the evolving landscape of special education. (Hallahan & Mercer, 2001) (Bradley, 2002)

## **1.4 Developmental and Academic Characteristics of People with Learning Disabilities**

Developmental and learning disabilities are conditions that affect brain functions and the ability to learn. These impairments have a long history of study and have been addressed from several perspectives over the years. Consequently, many researchers have explored the factors contributing to these disabilities, including genetic, neurological, and environmental factors.

### **1.4.1 Developmental Learning Disabilities**

Representing the abilities a child needs to excel in academic subjects, these skills require a mix of mental and physical abilities like perception, visual skills, movement, and memory usage. Consequently, a lack in these abilities hinders the learner from performing essential educational tasks such as writing, reading, critical thinking, and mental arithmetic.(Matar, 2023; P,4)

Solarsh and Hofman (2011) state that:

*Developmental Disabilities are disorders of the developing nervous system that manifest during infancy or childhood as developmental delay or as limitations of function in one or multiple domains, including cognition, motor performance, vision, hearing and speech, and behavior.* (p.125).

This indicates that these disabilities hinder the development of the nervous system and cognitive abilities, including motor skills, vision, hearing, speech, and behavior, which manifest during infancy.

#### **1.4.2 Academic Learning Disabilities**

Most of these difficulties appear in schools, where the teacher begins to detect and observe learners who have trouble or deficiencies in performing linguistic and mathematical tasks (Matar,2023)(mahmoud,2006-2007). **McCarney** and **Arthuad** (2007) and **Dhanda** and **Jagwat** (2013) noted that, **“The most commonly reported academic learning difficulties are those that affect one’s ability to calculate, write, read, and express oneself”** (as cited in Al-Qadri et al., 2021, p. 2)

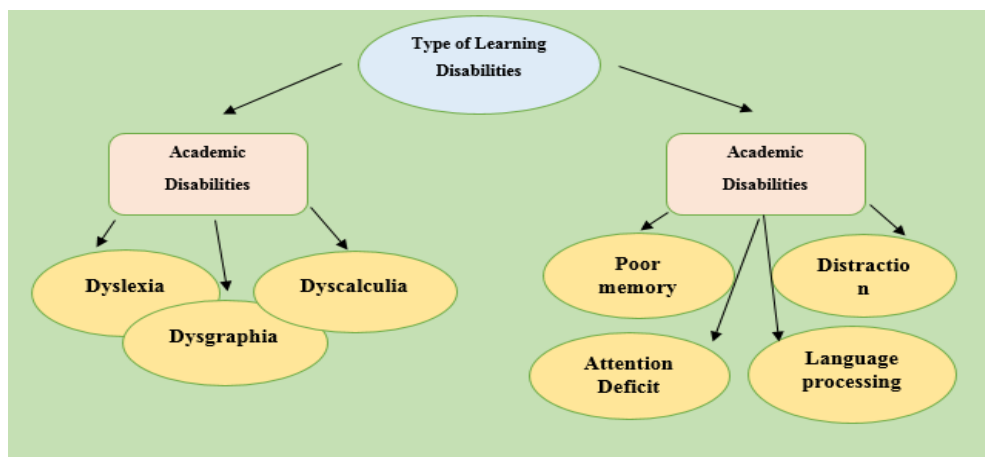
Hence, LDs and learning problems are two distinct concepts that is should be differentiate, LDs occur as neurological disorders that display the function of information, while learning problems are a result of various factors such as sensory impairments, environmental, and social factors. LDs are characterized by various types, including dyslexia, which refers to reading issues; dysgraphia, which relates to writing problems; and dyscalculia, which is a disorder involving mathematical impairments.

To achieve success individuals with special impairments needs an early intervention and specialized assessments and interventions linked with the appropriate support from the family environment first and the school and the society second.

#### **1.5 Types of Learning Disabilities**

Learning Disabilities are neurologically based processing problems that influence somebasic learning skills; Individuals with LDs may face difficulties in one or more aras of academic achievement, including reading, writing, mathematics and other skills. All observers and officials responsible for this category of children agree that they share common features, the most important of which are: (Matar,2023 ; p,4)

- Excessive mobility
- Impulsive and reckless response and speech
- Language and verbal difficulties
- Difficulties in remembering and thinking
- Difficulties understanding instructions
- Difficulties with sensory-motor coordination
- Slow completion of tasks such as writing, reading, and problem solving
- Unbalanced and inconsistent behaviours
- ((SSI), 2016)Avoiding class participation and withdrawal
- Anxiety
- Shyness
- Difficulties forming social relationships



*Figure 1.1.* Types of Learning Disabilities

Here are some general characteristics categorize some disorders:

### **1.5.1 Attention Deficit Hyperactivity Disorder (ADHD):**

Attention is an important element in education; it is the only way to succeed and the correct method of acquisition of knowledge, tasks, and instructions. Thus, poor attention is one of the most difficult issues that may face students consequently they suffer from daydreaming in class, which makes them late and fail in their academic path. Therefore, most researchers agree that these students with learning difficulties have normal mental and intellectual abilities, but they suffer from issues with concentration and attention, which leads to low grades and failure for a minimum of two years.

This disorder is related to the neuroscience field and affects both children and adults. It has long been known that the mental illness known as attention deficit-hyperactivity disorder (ADHD) impairs children's capacity to operate. It is characterized by persistent patterns of inattention, hyperactivity, and impulsivity that can significantly influence daily life functioning and development. The symptoms emerge at an early age and often include signs like lack of attention, lack of concentration, disorganization, difficulty performing in different situations, poor memory, and losing things. (Magnus, Nazir<sup>1</sup>, Anilkumar<sup>2</sup>, & Shaban<sup>3</sup>, 2023) There are three main types of ADHD with a predominant symptom:

- a) Predominantly Inattentive presentation (ADHD-I) is characterized by:
  - Difficulty sustaining attention in tasks.
  - Lack of attention.
  - Distraction during the lesson.
- b) Predominantly Hyperactivity- Impulsive presentation (ADHD-HI) patients could have:
  - Inability to stay seated (hyperactivity).
  - Impulsivity such as interrupting others talking.
- c) Combined presentation (ADHD-C) is the combination between inattention and the two symptoms.

### **1.5.2 Poor Memory**

Memory plays a crucial role in Learning Disabilities (LDs) because it directly impacts how well we perform in various academic subjects and cognitive tasks. The work of memory requires thinking about previously stored information while thinking about the new information received by the brain to be associated with it in order to change or develop the idea, and memory is also used to store information of different durations. Memory can also be used for mathematical calculation and problem solving by remembering previously memorised operations and laws. From this we find that memory is affected by any factor that may affect the mind, such as distraction.

In a regular classroom, students need to remember information (storage) and understand it (processing), like listening to the teacher while taking notes. But some students struggle with this, like those with special needs or learning disabilities, and may find it hard to learn. (Pradeep Kumar Gupta, 2017)

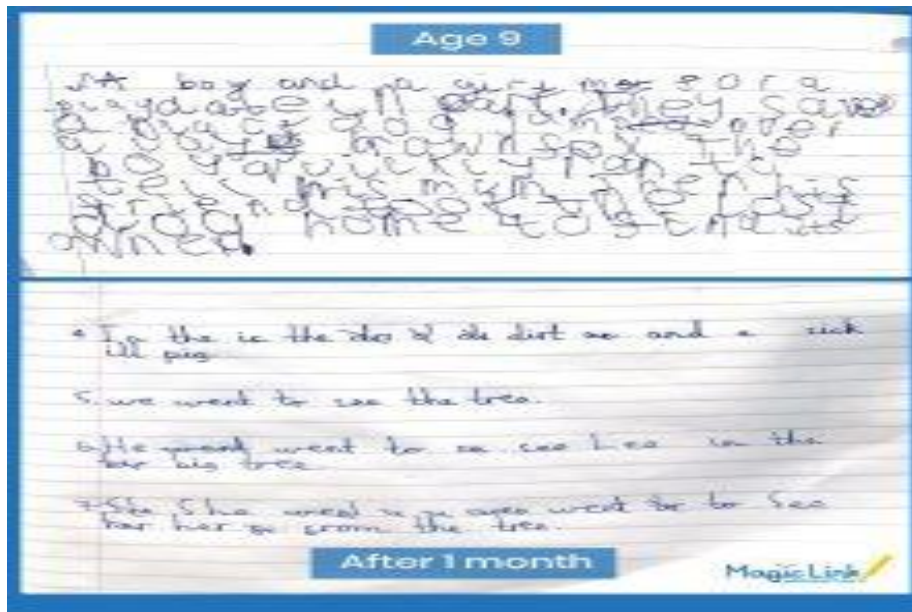
### **1.5.3 Language Processing**

In this case, some children face a lot of problems in expressing their thoughts verbally due to the limited vocabulary and bad memory retrieval which put them in difficult situation in the exams. Besides , they do not have the ability to understand the spoken language or the instructions in the classroom. Moreover, Children with speech and language difficulties suffer from a range of conditions that interfere with their capacity to communicate. Severe speech and language impairments are especially dangerous because they can hinder or prohibit a kid from participating in the family and the community, achieving academic success, and eventually finding work. ((SSI), 2016)

### **1.5.4 Dysgraphia (Writing Disability)**

Some children struggle with writing from an early age, resulting in handwriting that is not legible and a lack of ability to arrange their ideas coherently on paper. Additionally, they have a great deal of stress about spelling and grammar norms. In schools, the term dysgraphia is not frequently used. One explanation for this is that learning problems can involve handwriting issues.

The lack of agreement in the field on a single definition or method of diagnosing dysgraphia is another factor. Dysgraphia, according to Richards (1999), is the inability to articulate ideas in writing form. Dysgraphia, according to Meese (2001), is the partial incapacity to recall how to write particular alphabetic or arithmetic symbols. (Crouch & Jakubecy, 2007)



*Figure 1.2.* writing of children with dysgraphia (Magic link handwriting, 2016)

### 1.5.5 Dyslexia (Reading Disability)

This type of LD is considered the most appropriate type of Specific Learning Difficulty (SpLD). Educationalists and policymakers use the term SpLD instead of dyslexia, arguing that some children struggle with word recognition, including poor spelling and phonological awareness. These challenges affect their reading skills and comprehension. One of the oldest definitions of dyslexia was contributed by the World Federation of Neurology in 1968. Dyslexia is a disorder manifested in difficulty learning to read despite conventional instruction, adequate intelligence, and socio-cultural opportunity. It is dependent on fundamental cognitive disabilities, which are frequently constitutional in origin. In this definition, dyslexia are treated as a disorder that affects the reading skill in which children have poor intelligence in learning to read, in addition to focusing on the constitutional nature of this disability. (Riddick, 2012, p. 2)

### 1.5.6 Dyscalculia (Mathematic Disability)

**Kosc 1970** defined developmental dyscalculia as a "**structural disorder of mathematical abilities...**(p.192)" originating from genetic or congenital issues in specific brain areas responsible for mathematical skill development. This condition occurs without any simultaneous disorder of general mental function and results in mathematical abilities below the expected level for one's age (Kosc, 1974, p. 47). It is characterized by difficulties in understanding numbers, delays in counting and applying formulas, problems with memorizing mathematical facts, and struggles in manipulating numbers. Studies show a direct link

between dyscalculia and impairments in general cognitive abilities, central executive functions, and visual-spatial skills (Geary, 2007). Although factors such as poor teaching, environmental deprivation, and low intelligence have been considered in the etiology of developmental dyscalculia, current evidence suggests that this learning disability is a brain-based disorder with a familial-genetic predisposition. The neurological basis of developmental dyscalculia is believed to involve both hemispheres, especially the left parietotemporal regions ( Shalev et al.,2001).

## 1.6 Diagnosis of Learning Disabilities

Children who are struggling with LDs may have more serious issues if they do not receive the essential supervision drawn from the process of identifying LDs via tests and assessments carried out by a multidisciplinary team of professionals.

On this basis, the Intelligence Quotient (IQ) achievement discrepancy model, it was first used by **Provus** (1966), serves as the traditional method that requires the conceptualization of whether the discrepancy exists between intellectual abilities and academic abilities (Deisinger, 2015, p.4). The discrepancy can be known as the difference that is being resulted between the performance and the standard (Buttram & Covert, 1978, p.1). If the child's achievement scores are below his or her ability scores it is more likely to be diagnosed by a serious discrepancy and a strong indication that the child has learning disabilities (Restorie et al.,2009, p. 192).

Despite the fact that discrepancy model is a dominant procedure in the diagnosis of LD, **Bradley, Danielson, and Hallahn** (2002), spotted its invalidity by termed it as a “wait-to-fail” approach **“because students who displayed academic difficulties in the early grades were often not identified with SLD until their discrepancies increased to a significant level, at which point these students were older, had experienced a prolonged period (years) of failure, and unlikely to catch up.”** (Kovaleski et al, 2022, p.6)

The Response to Intervention (RTI) model, also called the Tiered Approach to Intervention, was proposed by the LD Summit and the President's Commission in 2002. It emphasizes high-quality instruction, universal assessment, ongoing achievement monitoring, research-based methods, and fidelity in educational interventions. The model focuses on how students respond to challenges, highlighting the presence of learning disabilities. It prioritizes

identifying students at risk rather than focusing on their deficits, making it a proactive approach. (Robinson & Hutchinson, 2014)

## **1.7 Causes of Learning Disabilities**

Neurodevelopmental disorders can display the brain's functions to acquire, process, store, and retrieve information effectively. Recognizing the factors that stand behind these LDs is essential in the sake of developing effective strategies for identifications, interventions, and support. The causes can be divided into genetic, biological, and environmental. (Bhate, & Wilkinson, 2006, p. 289)

Research indicates that learning disabilities are often passed down through families, with genetic factors being more significant than biological and environmental factors. Previously, severe learning disabilities were believed to be caused by genetics, while milder ones were caused by biological and environmental factors. Chromosome abnormalities can be detected in up to 25% of people with learning disabilities (Bhate & Wilkinson, 2006, p. 289). Identical twins are more likely to have reading disorders than fraternal twins. Up to 70% of cases of learning disabilities may be linked to genetic and hereditary factors (Kaur & Padmanabhan, 2017). Additionally, issues with the nervous system during pregnancy and after birth are thought to play a role in Specific Learning Disorders (Rao, 2003; Bhandari & Goyal, 2004, p.172).

Neurological theories suggest learning disabilities are caused by structural damage or improper development of the nervous system, which can occur before or after birth. Factors like head injuries, lack of oxygen, toxins, seizures, and nutritional deficiencies can damage the central nervous system (Bhandari & Goyal 2004, p.172). These disabilities often result in cognitive deficits, such as difficulty understanding space, hearing, and distinguishing between sounds. Researchers have sometimes misinterpreted the origins of learning disabilities, such as dyslexia, but recent studies suggest reading challenges are more closely connected to language and sound comprehension. Math learning problems, or dyscalculia, are often a result of varying individual characteristics and may even be within the same person (Büttner & Hasselhorn, 2011, p.97).

Environmental factors such as malnutrition, premature birth, inadequate healthcare, stress, ineffective parenting, and inadequate teaching methods can contribute to the development of

learning disabilities. These factors increase the likelihood of brain dysfunction, negatively affecting learning. Other factors include substance abuse, lack of proper learning models, emotional disturbances, and social and cultural deprivation (Silver & Hagin, 2002; Bhandari & Goyal, 2004, p.173).

## **1.8 Adaptive Education**

Within the school system, children with impairments often encounter a range of challenges. Consequently, the primary objective of the current educational system is to diminish the dropout rate while ensuring equitable services in an environment of equal opportunity. According to the stipulations set forth in CRPD Act 24, individuals with disabilities are entitled to educational opportunities based on equity. Adaptive education is an approach aimed at attaining a shared instructional objective among students who exhibit diverse individual characteristics, including prior achievements, aptitudes, or learning styles (Borich, 2011; Ikwumelu et al., 2015, p.141).

### **1.8.1 Features of Adaptive Education**

Adapted education was introduced in Algeria on March 12th, 2000, by the Ministry of Education where the first adapted classroom was opened. This educational approach is primarily centered around providing treatment, continuous monitoring, and attentive care to students experiencing various educational difficulties, particularly those exhibiting delays and deficits in academic achievement. Such challenges often manifest during the early years of primary education, influenced by the psychological and social conditions in which some students find themselves. The primary goal of adapted education is to establish an appropriate learning environment for individuals facing learning difficulties and academic delays. This is achieved through the provision of individualized care, utilizing a variety of methods aimed at reducing deficits within this student population. Central to this approach is the detection, diagnosis, and tailored educational treatment specific to each student's unique circumstances and needs.

### **1.8.2 The Adaptive Education Strategies**

In Algeria, adaptive education addresses learning disabilities and includes psychological treatment within specialized adaptive classrooms in primary and secondary schools. These classes offer tailored programs and pedagogical approaches to help students with learning and intellectual disabilities overcome challenges and reintegrate

into regular classes. The Minister of National Education has called for more adaptive education classes and the establishment of pedagogical psychiatric committees to detect and treat various impairments and dysfunctions, ensuring students receive the necessary support for educational success. (Adapted education in primary school Algerian, 2023) This educational approach is designed to shape the complexity of tasks and the instructional methods to meet the learner's learning profile, thus, **“an adaptive education system aims to take into account the individual differences among students by providing the materials, activities and teaching methods that best accommodate student needs and abilities.”**(Alzain, et al, 2018, p: 44)

### **1.8.3 The Teacher Responsibilities in Adaptive Education**

As a special teacher it requires to follow a special strategies to teach individuals with special impairments, therefore, teachers in adaptive education are responsible for identifying students who require placement in special classes, creating personalized learning plans, assisting students who are behind in understanding their difficulties, modifying teaching methods, tracking and assessing student progress, collaborating with parents on comprehensive plans, employing various instructional strategies, and regularly monitoring and adjusting these plans as necessary. To accomplish this, the teacher must acknowledge the diversity in the classroom, exploring different approaches, and using professional expertise, thus **“effective teachers recognize variation in situation, imagine multiple possibilities and apply professional knowledge differentially”** (Fairbanks et al, 2010; Athanases, et al., 2015, p.84).

### **1.8.4 Children concerned with the Adaptive Education**

Adaptive education is a system designed to help children integrate with their peers and overcome psychological challenges in society. It aims to support those who fail in the second year of primary education due to difficulties in the first and second years. The selection process involves a team of professionals including a school guidance counselor, headmaster, health doctor, psychologist, and orthopedist. This evaluation helps identify the specific difficulties these children face and provides appropriate support and educational strategies (Salsli & Dematti 2023).

### **1.8.5 The Integration of Individuals with Learning Disabilities**

Learners with special impairments are supported by the adaptive system, which facilitates their reintegration into regular classes alongside other students. The term "integration" is derived from the latin word "integer," meaning completeness and coherence (Vajová & Žolnová, 2015, p.67). Consequently, the adaptive system aims to incorporate individuals with learning disabilities (LDs) into mainstream education. According to **Jesenskeho** (2000, p. 23) integration is a **"dynamic, gradually evolving phenomenon of the target individual, which leads to a relationship, communication, and cooperation of all participants in the educational process under the same level of conditions"** (as cited in Vajova & Žolnová, 2015, p.67). This underscores the goal of adaptive systems to create an inclusive and supportive learning environment for all students.

Various methods are employed to achieve the goal of school integration, and these approaches differ from one school to another. According to Ghachir (2017, p. 5), integration depends on two main forms: partial integration and full integration. Partial integration allows learners to join their peers in regular classes for a single day, receiving the same education from a regular classroom teacher. Afterward, they return to their specialized classrooms to continue their tailored lessons, with additional reinforcement and support for their social skills. Full integration involves incorporating individuals with learning disabilities into regular classes alongside their typical classmates. This process requires the rehabilitation of these learners prior to integration and necessitates clear responsibilities among the administrative apparatus in both regular and special education.

### **1.9 Conclusion**

In conclusion, this chapter cover all terminologies that represent the issue of learning disabilities and its types. In this theoretical chapter, researchers relied on various previous studies and some books to expand further on this aspect. they touched on the definition of learning disabilities as a key element of the research, completing this chapter with what adapted education is, which in turn is a key element in this study because of its effective role in addressing and following up on these difficulties.

# Chapter two

## **Data Collection and Analysis**

## **Chapter Two**

### **Data Collection and Analysis**

#### **2.1. Introduction**

#### **2.2. Research Design**

#### **2.3. Sample selection**

#### **2.4. Data Collection Instrument**

##### **2.4.1. Classroom Observation**

##### **2.4.2. Teachers' Questionnaire**

##### **2.4.3. Teachers' Questionnaire**

##### **2.4.4. Teachers' Interview**

#### **2.5. Data Analysis**

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#### **2.9. conclusion**

# Chapter Two

## Data Collection and Analysis

### 2.1 Introduction

This chapter bridges the gap between the theoretical framework and practical execution. It seeks to explore learning disabilities, including developmental disabilities, and their impact on academic achievement. Additionally, it sheds light on the quality of educational services provided to these students, designed to meet their needs, and investigates how teachers address these challenges. The practical components of this side explores the application of qualitative and quantitative data collection and the analysis of the findings.

### 2.2 Research Design

Research design is the most important aspect of building a good methodology. According to **Kerlinger** (1986, p. 279), research design **“is the plan and structure of investigation so conceived as to obtain answers to research questions.”** Therefore, it is often referred to as the blueprint of a scientific study. It details the methods used, the analysis of findings, and encompasses procedures, strategies, sample selection, and data collection approaches. Consequently, it provides a systematic and rigorous framework for accomplishing the research aims (Yin, 2009). In this endeavor, the research design guides researchers in selecting questions and developing a framework that outlines the research structure for collecting, analyzing, and interpreting data, ensuring the validity and reliability of the findings.

#### **Research Methods**

The research methods refer to the various techniques and approaches used in the research to obtain precise data for answering a research question and adequately testing the hypotheses. These methods are selected by the researcher based on the needs of the research.

The method selected for this research is the mixed methods approach, which includes the use of both qualitative and quantitative methods to enhance the comprehensive understanding of the research through triangulation. This approach allows researchers to test their hypotheses in a reliable way. Since the mixed methods (hence forth MM) research tradition has just recently become recognized as a distinct viewpoint, it is not as well-known as the QUAN or QUAL traditions. In contrast to the QUAN and QUAL traditions, mixed

methodologists support using any methodological tools needed to address the research topics at hand. Indeed, as multiple sources (e.g., Brewer & Hunter, 1989, 2006;) explain, social and behavioral scientists often used MM in their studies throughout the 20th century and they still do so today.

### **2.3. Sample Selection**

The sample selected for this study consists of four teachers from two adaptive education classes at Aslaoui Mohamed Primary School in Mecheria. Two of the teachers instruct in Arabic, and one teaches English. Additionally, one teacher teaches French across the two classes. Each class contains ten pupils, with five pupils per class. All classes were observed to document learning practices such as reading, writing, and exam-taking, in relation to their learning disabilities and classroom behaviors. The observations also focused on the strategies and techniques employed by the teachers to support the pupils. To further support the data collected and obtain precise results, questionnaires were distributed to nine parents.

This study focuses on three teachers from two adaptive education classes at Aslaoui Mohamed Primary School in Mecheria, teaching Arabic, English, and French. The classes have ten pupils, with five per class. The observations document learning practices, classroom behaviors, and strategies used by teachers to support students with learning disabilities. To obtain precise results, questionnaires were distributed to nine parents.

### **2.4 Data collection Instruments**

In this part, researchers uses various instruments in their collecting data in order to provide multiple data sources through qualitative and quantitative data collection this facilitate the use of triangulation method to achieve certain level of informing and validationg the research findings.

#### **2.4.1 Classroom Observation**

The pupils here are put under observation during three session two of Arabic and one of English the focus was on the pupils with learning disabilities from different ages, their behaviors, their response in classroom lectures and their interaction with their teachers whithout forgetting the teachers' roles. Also take notes about different details in adaptive

classrooms, besides taking looks at different things such as books, hand writing of pupils, reading skill, and focusing more on every child and his or her disabilities.

#### **2.4.2. Teachers' Questionnaire**

The questionnaire n<sup>o</sup>1 was addressed to teachers of primary school, it divides into four (4) sections, the first section is about the teacher primary information such as gender, level of education and years of experiences. The second section is about information about the adaptive classroom, the third one is about the challenges faces by the adaptive classroom and finally the forth section is related to the teachers' challenges within adaptive classroom. The complete questionnaire consists of seven (7) closed-ended questions, one (1) likert scale question, six (6) multiple options questions additionally to three open-ended questions followed some questions asa justification or state of some elements.

This questionnaire has the aim to identify some quantitative data related to learning disabilities and to obtain enough information and explanation about this kind of learning.

#### **2.4.3. Parents' Questionnaire**

The second questionnaire was distributed to the parents of pupils in order to know more about the situation of their children. It consist of two sections, one for primary data and the second about their situations and opinions about adaptive education, it contains six (6) closed-ended questions, two multiple options questions and three (3) open-ended questions for more information. This questionnaire was answered in classroom by our presence for different reasons.

#### **2.4.4. Teachers' Interview**

The interview in the beginning was informal with the teachers by asking them several question randomly for gaining more information and insights about adaptive classroom and children's behaviors then it was prepared as structured interview with the three teachers, in which asked them the same questions in the same order, one by one over three days, the interview contains four (4) questions they have been focused on to give the participant the time to explains and expands further in the answer for more details.

### **2.5. Data Analysis**

In this part , researchers analyze the collected data obtained through several instruments which they count it and organize it through tables and illustration based on pie graph and chart.

### **2.5.1. Classroom Observations**

The observation is the basis of the research , the researchers need to write down some important points in the research , according to the research's nature, this helps to investigate and test the hypotheses. During this observation, multiple remarks and reflections were obtained through note-taking during the two lessons of arabic session from two classes, third year and fourth year and a lesson and exam of fourth year pupils with the english teacher of primary school.

The first focus is about the teacher- student interaction, this item was very clear and present in third year more than forth year with the teachers of Arabic and little present with the English teacher. In this case, all the students in third and forth year classes had engaged in the classroom due to the hyperactivity, and the teacher was giving them instructions and they were answering in the same time , but this interaction has after several repetitions and alerts by the teacher , through calling their names loudly to prevent their deviation or distraction.

The second focus is about classroom engagment where the classroom's organization was not present, it was a little bit dusty, there was too much wallpapers with a lot of colors. It was noticed that majority of the pupils get distracted because of it. In addition, the classroom materials were very , in which the classroom was well equipped with a lot of games designed for children with learning disabilities such as Montessori games, puzzles, complex games, and microphones. Those games help pupils with dyslexia and dysgraphia to enhance their writing and reading in Arabic, french, and English. Also the non- present of the teacher's management in classroom, where Students were too active one of the cases kept scrambling to get the attention of her teacher, it was stubborn and hard to manage while the others kept walking in the classroom and bringing stuff from the cabinet , The teacher was trying her best to engage them with the lesson. They had focused with her only in the beginning of the lesson then they zoned out. Furthermore, the use of effective methods by the teacher was present in which The teacher plays a big role in giving, supporting, and guiding her pupils. She uses different methods and techniques just to teach them how to write and read, she constantly uses continuous stimulation, teacher-initiated alerting, and opportunity education.

Besides, according to the principle of research of learning disabilities and the impact of developmental disabilities on learning acheivment, researchers took a note about the classroom atmosphere where the focus was about the pupils' with LDs friendly in which

this item differs from one pupil to another. In the beginning of the session they were shy and afraid of us and they kept giving that strange look, after a few moments they started to talk and showing us their hobbies but not all of them. After this, researchers moved to adaptive education characteristics starting with curriculum which plays the important thing for pupils with LDs and teachers, Unfortunately there is a specific book for adaptive classroom; but it is the same because it shares the same curriculum for the normal pupils, which makes it too long and difficult to teach and learn in easy way. Additionally to the teachers' qualification to deal with this kind of learning, here the teacher is well qualified to deal with this kind of learning of children with developmental disabilities and also with academic disabilities, but the problem is the curriculum provided for those pupils; it exceeds their level, it makes the teacher selective in teaching them, thus, it is very difficult for the teacher since it needs a lot of energy.

Moreover, the researchers were taking note about every single pupil and his or her developmental and academic disorders naming the pupils with the first letter of their names, this helps us to know more about the kinds of disabilities and how these disabilities influence the academic one and then the academic achievement. We saw that the majority of pupils suffer from hyperactivity, they can not stay long in their seats, which this affects their attention during the lecture, the acquisition and success. Also, the majority have problems of concentration and memory, they have a short memory and quick forgetfulness in those minutes of lecture this makes the learning and teaching process hard for the teachers, there are also one pupil suffers from excess saliva and throat strain as a result of a motor disability, which has a significant impact on rapid pronunciation and reading.

### **2.5.2. Teachers' Questionnaire**

In the beginning, some points should be noted that 3/4 questionnaire was answered (one teacher refrain from answering), the results are presented and analyzed below:

#### **Section One: primary information**

This section contains demographic and factual information, notably only the presence of females. Due to the interest that females exhibit in the field of education, which often tends to be characterized as more communicative in nature, it may influence student's interests and engagement in the educational settings. Thus, the impact of gender representation on research

aims is considered insignificant and irrelevant. Additionally, the three teachers hold a magister\master degree, which reflects the advanced educational attainment.

**Section Two: information about adaptive classroom**

**Question n°4:** number of pupils in each class

Class	Number	Gender	
		Male	Female
3 <sup>rd</sup> year class	5	4	1
4 <sup>th</sup> year class	5	1	4
Total	10	5	5

**Table2.1.**The Number of Pupils of Adaptive Classrooms

The total amount of students is (5) in the classroom, which has been defined as the minimu level that teacher can posses, according to the Algerian Minsitry of National Education.

**Question n°5:** does all pupils suffer from poor concentration?

Responses	N	%
Yes	3	100%
No	0	0

**Table2.2.** The Percentages of Students Displaying Poor Concentration.

All the teachers replied affirmatively, indicating a comprehensive understanding of the issues that pupils experience in the classroom.

**Question n°6:** number of pupils who suffer from distraction

Teachers’ responses	Number of pupils
Teacher1	3 pupils
Teacher 2	3 pupils
Teacher 3	All pupils

**Table2.3.**The Number of Pupils with Distraction in both Classes.

More than half of the participants indicated that 80% of students suffer from lack of concentration, alongside 100% of the participants stated that this issue is an obstacle to teaching and learning.

**Question n°7:** does all pupils suffer from hyperactivity?

Responses	N	%
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Yes	3	100%
No	0	0

**Table2.4.** Teachers’ Response about the Hyperactivity Pourcentages

As it is shown in the table, all teacher have agreed that Deficit Hyperactivity Disorder (ADHD) is a common trait in all the pupils with Learning Disabilities.

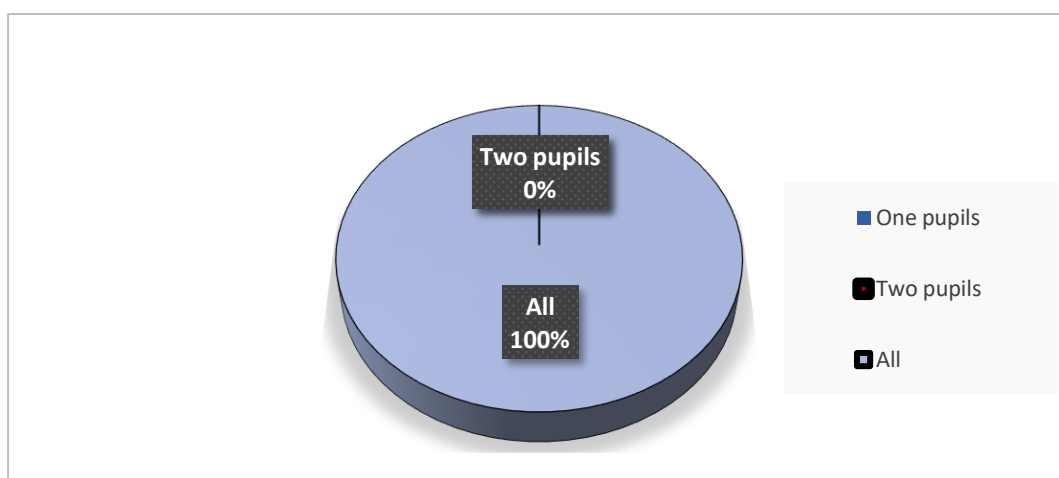
**Question n°8:** does hyperactivity influence the concentration of pupils during the lecture ?

Responses	N	%
Yes	03	100%
No	0	0

**Table2.5.** The Teachers’ Response about the Influence of Hyperactivity

Participants common ground that ADHD hinders student’s ability to maintain focus in the classroom

**Question n°9:** how many pupils who suffer from poor memory and forgetfulness?



**Figure2.3.** Teachers’ Reponse of the Number of the Pupils’ Poor Memory

It releaved in the questionnaire that pupils in both the third and the fourth grade are having trouble with forgetfulness, thus, it was reported that all the cases struggling with this issue.

### Section N°3: The adaptive classrooms’ challenges

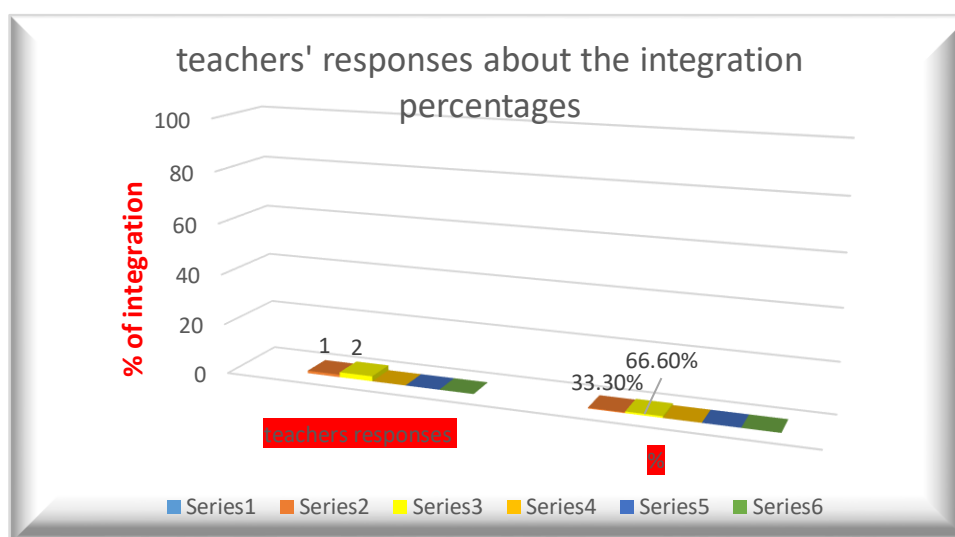
**Question n°10:** What is the upper limit for the duration of study within the adaptive classroom?

Number of years	N	%
One year	0	0
Two year	0	0
More than two	3	100%

**Table2.6.** The Teacher's Reponse about the Maxumum Years of study in Adaptive classrooms

In the table above, there is an overwhelming agreement among all the participants of this questionnaire that the maxium years of study in daptive classes do not exceed more than two years.

**Question n°11:** what is the pourcentages of integration of pupils within the normal classes ?



**Figure2.4.** Teacher's Reponse about the Integration Percentages

The statistics cited above represent the teacher responses regarding school intergration, finding that most of the participants reported that only 66.6% of integration occurs, while others indicated 33.3% of intergration, this indicated a significant gap in understanding the process of intergration.

**Question n°12:** does the developmental disorders influence the percentage of success and hinder the process of academic integration? If yes mention some of the obstacles that you face in the classroom.

Responses	N	%
Yes	3	100%
No	0	0

**Table2.7.**The Influence of the Developmental Disorder on Success and Integration

It should be mentioned that many teachers if not all of them have answered with “yes”, they’ve shared the same response (100%). This denotes that there are several challenges faced by the teacher in the classroom, namely, the constant distraction, forgetfulness, poor memory and poor concentration, those are the common effects that hinder the process of both teaching and learning. Thus, these developmental disabilities are accompanied by special physical disability that simulate the sense of speech. They’ve continued to consider that it is crucial for the teacher to manage the classroom, it almost took a bunch of time and a lot of energy to teach those children simple things. Besides, the curriculum that exceeds their mental abilities, especially in the Arabic and mathematics subjects. As for the psychological sides, those children have a fragile personality which is associated with shyness, social anxiety (phobia), and stuttering.

#### **Section N°04: the teacher’s challenges in adaptive classroom**

**Question n°13:** does the curriculum affect you ? in both cases clarify your response.

Responses	N	%
Yes	3	100%
No	0	0

**Table2.6.**The Teachers’ Response about the Curriculum Affection.

Here, all the participants answered affirmatively, attributed to reasons outlined by teachers. These reasons include challenges such as the complexity of the curriculum, which leads to difficulties in effectively conveying concepts to pupils, as well as struggles with maintaining focus during the session. This difficulty highlights the inadequacy of the curriculum directed for children with LDs, which fails to align with their cognitive needs and

may lead to burnout for the teacher. Not to forget the notable absence of family support, the non-existence of psychological follow-up, and access to communication specialists.

**Question n°14:** Is the adaptive education in the welaya of Naama succesful and meets its intended purposes?

Responses	N	%
Yes	0	0
No	3	100%

**Table2.9.** The Teacher’s Response about Adaptive Education in Welaya of Naama

This question was asked if the adaptive education in the research area is succssfull and achievable. Consequently, all the responses were (100%) no this implies that the adaptive education fails to fulfill its main objektivies.

**Question n°15:** the adaptive education play a crucial role in enhancing the reading and writing skills and such negative behavior change.

	Strongly disagree	disagree	neutral	agree	Strongly agree
NI	0	0	0	1	2
%	0	0	0	33.3%	66.66%

**Table2.7.** The Teacher’s Response about Adaptive Education in Welaya of Naama

Most teachers perdominantly (66.66%) chose “Strongly agree” to indicate their belief that adaptive education has successfully improved student’s reading and writing skills. Others (33.3%) opted for “ agree”, indicating a consensus that adaptive education plays a role in enhancing individual’s abilities

**Question n°16:** does the region of Naama are meet all the conditions of adapted education?

responses	NI	%
Yes	0	0
No	3	100%

**Table2.8.**The Teacher’s Response about the Region of Naama and Adaptive Education

The overwhelming majority of teachers (100%) gave negative answers, indicating that the Naama area does not satisfy the requirements for adaptive education, such as materials, specialists in these domains.

### 2.5.3. Parents' Questionnaire

This questionnaire contains questions about the parents opinion and point of view about the adaptive education and its impact on their children with disabilities.

#### Section N°01: primary information

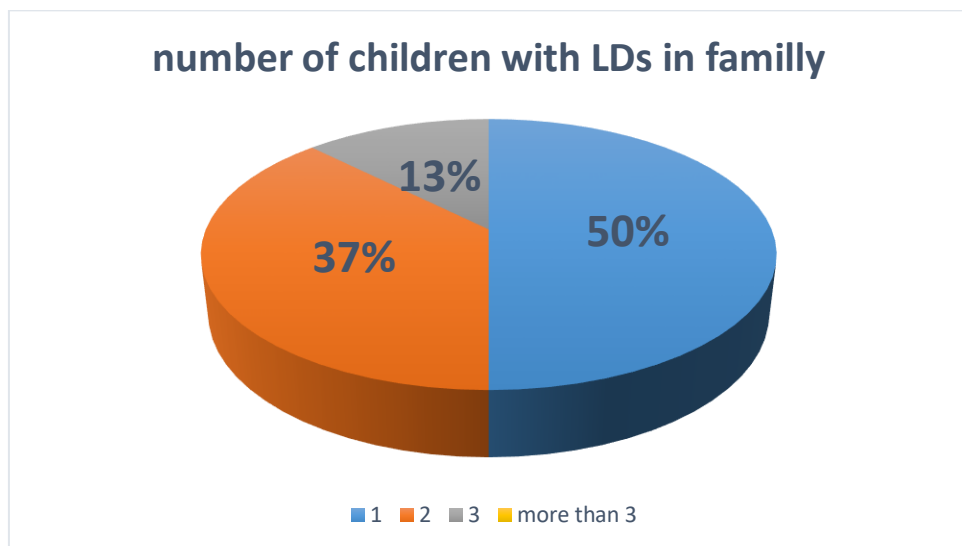
##### Question n°1: gender

gender	N	%
Male	04	50%
Female	04	50%

**Table2.12.** Parent's Gender

The table above illustrates the gender availability of both fathers and mothers who completed this questionnaire; it demonstrates that 50% of males (fathers) and 50% of females (mothers) are equally sharing the interest of answering this questionnaire

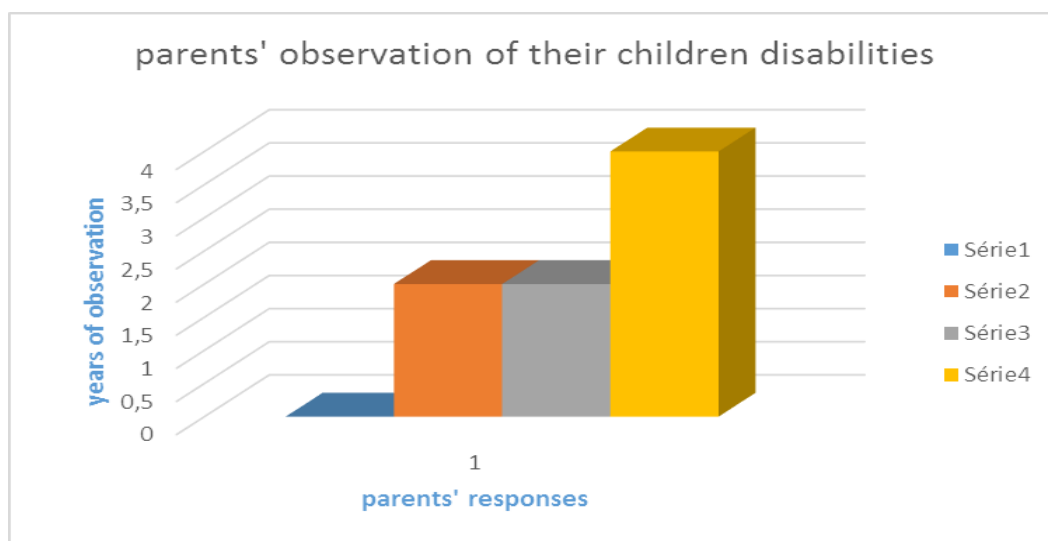
##### Question n°02: number of children with LDS in family



**Figure2.5.** Number of Children with LDs in Family

According to the table and figure above, 50% of the participants had only one incidence of learning difficulties, while the remaining 37.5% had just two. On the other side, 12.5% reported that more than two instances were in the family.

**Question n°03:** how old your child was when you found out about mental disabilities?



**Figure2.6.** Parents' Year of Observing their Children disabilities

It was determined that none of the participants (0%) detected their child's learning problems in the first year, however 25% of the parents discovered their child's mental disabilities at the age of two, and the remaining 25% at the age of three. This implies parental awareness. On the other hand, 50% of them took a long time to identify this issue, which is indicated in the question as "more than three years".

### Section N° 02: parents' opinions

**Questions n°04:** are you experiencing any social stress due to your child's developmental disabilities?

responses	N	%
Yes	05	62.5%
No	03	37.5%

**Table2.9.**Parents' Social Stress Experiences.

To address the social stress that the parents of children with LDs experience, 05 of them had answered with “yes”, whereas the other 03 replied negatively with “no”.

**Question n°05:** List some examples of social stress.

In the context of analyzing the pressure that parents experience due to their children’s mental conditions, it was reported that some cases face significant difficulties, particularly concerning the crucial treatment a father provides for his daughter. It was stated that the daughter was subjected to bullying in front of other family members due to her disability, exacerbating her struggles, especially related to weight issues. Another case highlighted a daughter suffering from both intellectual and physical disabilities (paralysis and speech difficulties), leading her mother to express regret over her daughter’s condition, which was caused by a medical error. Aside from the sympathetic glances received when seen in a wheelchair, these parents face serious challenges regarding their children’s disabilities. One parent pointed out that their child often cries due to the ignorance of others about his disability. Particularly distressing is when the child faces bullying and subsequent tears, with some declaring the child to be old enough to handle such situations.

**Question n° 06:** how to deal with your child in term of distraction ?

Distraction can hinder efforts to support children with intellectual disabilities, prompting parents to employ various techniques to refocus them. Many participants highlighted the value of remaining consistently alert, while others stressed the importance of patience and gentleness. Furthermore, repeatedly calling out their names was seen as crucial for regaining their attention. A minority suggested tapping the table whenever the child became distracted to reconnect them with the real world .However, one participant diverged from these strategies and recommended a different approach which is raising their voice to get the child's attention.

**Question n°07:** in your point of view, does the curriculum suit to your child’s abilities in classroom?

Responses	N	%
Yes	02	25%
No	06	75%

**Table2.10.**Parents’ Responses about the Curriculum

Children with learning disabilities require specialized teaching, as the educational system has proposed a tailored curriculum for them. In this questionnaire, participants were asked if their child benefited from this curriculum. As a result, 75% of the participants responded with "no," indicating that the curriculum does not align with their child's abilities, whereas the remaining 25% responded with "yes," indicating that it does suit their child's disabilities. This highlights a discrepancy between the needs of children with disabilities and the settings of the curriculum

**Question n°8:** have you noticed any improvement in your child's behavior, personality as well as in writing and reading skills ?

Responses	N	%
Yes	08	100%
No	0	0

**Table2.11.**Parents' Opinion about the Change in their Children

It is well-known that reading difficulties (Dyslexia) and writing difficulties (Dysgraphia) are common issues that impede the learning process and can impact a child's character development. Parents were questioned regarding any improvements they have noticed in their child's reading and writing skills, as well as their personality development. All parents responded affirmatively (100%), indicating that there are indeed signs of improvement in their children. This suggests that interventions targeting these difficulties may positively influence not only academic skills but also broader aspects of personal growth and development.

**Question n°9:** if the answer is yes, choose the improvement pourcentages

Pourcentages of improvement of children	N	%
10%	01	12.5%
20%	0	0
50%	04	50%
100%	04	50%

**Table2.12.**Parent's Response about the Improvement in their Children

The table above illustrates the percentage of improvement observed in the children, along with the participants' responses. Half of the parents (50%) noted a significant progress in their children's abilities (100%), mirroring the other 50% who identified advancements in both reading/writing and personality development, collectively indicating a 50% improvement. A minority, constituting 12.5% of parents, reported an average progress, rated at 10%. Conversely, none of the participants selected the 20% development option.

**Question n°10:** what kind of support do you provide to your child at home to further improve skills?

Family support is essential, and caring for these children is crucial for both parents. Participants outlined various forms of support, despite the challenges faced by some. Much of this assistance is psychological in nature, such as reading stories to the child alongside their siblings and providing incentives like prizes, educational games, comics, and puzzles to encourage studying. Additionally, educational support is offered, such as reading from textbooks to aid comprehension or providing continuous writing tasks at home. One participant highlighted the effectiveness of chanting training in improving her daughter's pronunciation and boosting her confidence.

**Question n°11:** are you satisfied with the adaptive education in the special classes ?

Responses	N	%
Yes	08	100%
No	0	0

**Table2.13.**Parents’ Opinion about Adaptive Education

Special classes, also known as adaptive classrooms, offer adaptive education. In this questionnaire, parents were asked about their satisfaction with this educational system. Remarkably, all participants (100%) responded affirmatively with a resounding "yes."

**Question n°12:** is there a child with LDs in your family succeeded and was integrated in normal class?

responses	N	%
Yes	0	0
No	08	100%

### **Table 2.18.** The Number of Children Priviously Integrated

The table above shows the parents' responses regarding the integration of other children into regular classes. Remarkably, all participants (100%) replied negatively.

**Question n°13:** what do you suggest as a solution in order to enhance the success and the positive change in your child's learning disabilities within adaptive education?

Despite the absence of some parents who are not familiar with adaptive education and what goes on inside the classrooms, most of the remaining parents unanimously agreed on the need to change the curriculum because they consider it beyond the capabilities of their children because of its difficult vocabulary and topics that they consider useless, and some have noted the increase in the number of different specialists in the city of Mecheria, as they suggested including public parks in the city of Mecheria to allocate picnic days for this category of children.

#### **2.5.4. Teachers' Interview**

This interview was conducted with teachers from both third and fourth grades of primary school. It comprises four questions, each of which underwent a detailed qualitative analysis and interpretation:

**Question1: as a teacher of adaptive classroom, what are the challenges that you face?**

The reporting from the adaptive classroom highlights several significant challenges faced by educators. One major issue is the lack of special attention given to certain students, potentially due to the presence of students with severe disorders who require more individualized care, thereby affecting the overall progress of the class. Additionally, there is a notable scarcity of specific educational resources, such as audio-visual devices and Montessori games, which are essential for creating an engaging and effective learning environment. The teachers also struggle with maintaining students' attention, which hampers the delivery of lessons and reduces teaching effectiveness. Compounding these problems is a widespread shortage of teaching materials and pedagogical resources, inadequate physical classroom spaces, a lack of visual aids, and incomplete allocation of sections. These factors collectively hinder the ability to provide a high-quality education to all students in the adaptive classroom.

**Question2: How is this group of students dealt with to reduce or minimize the rate of forgetfulness and distraction in the classroom?**

The adaptive classroom teachers employ a variety of strategies to address forgetfulness and distraction among students. Educational games, fostering competition, and motivating students with rewards are effective methods for keeping students engaged and alert. Continuous repetition and memory activities are also crucial, with the Montessori method being particularly beneficial for this category of children. The importance of the pre-school stage is emphasized, advocating for specialized education during this period. Additionally, theater and photography are used to convey intangible and visual ideas effectively. The use of gestures, illustrated photos, and videos are highlighted as essential techniques for capturing and maintaining the child's interest. Motivation and alertness are crucial for keeping students focused, and creating a stimulating and supportive learning environment is vital for facilitating student engagement and participation.

**Question3: As a teacher, what do you suggest to increase the success rate and consequently the integration rate?**

The teachers in the adaptive classroom emphasize the importance of a structured educational progression and specialized support for students. One teacher highlights the significance of beginning pre-school education at the age of six, transitioning to a preparatory class the following year, and then moving to the first grade in the subsequent academic year. For pupils intended for integration, attending some classes in the regular section during the third trimester serves as a prelude to full integration the next year. Another teacher stresses the involvement of specialized professionals such as speech therapists and psychologists alongside the teacher to aid in the integration process. Additionally, it is noted that preparatory classes before preschool are necessary to help children acquire essential daily life skills such as eating and sitting, as well as to modify behavior to ensure they are prepared for adequate education. Teaching these daily life behaviors is described as exhausting and time-consuming, requiring significant time and energy since the teacher is not specialized in this area.

**Question4: Based on your opinion, does the region of Naama in general, and El Mecheria in particular, meet all the requirements for adaptive education?**

The teachers in the adaptive classroom highlight several critical issues that impede effective teaching and learning. One major concern is that the selected sample of students does not meet the necessary requirements, leading to significant disparities in academic

levels. The mixing of disabilities, such as autism and intellectual disability, within a single classroom further complicates the teaching process and presents challenges beyond the teacher's scope. There is also a notable shortage of educational resources, which makes teaching particularly difficult. This problem is exacerbated by the almost complete or partial lack of support from the pedagogical team, including life skills instructors, psychologists, pedagogical specialists, speech therapists, and physical education teachers.

Another significant issue is the absence of specialized personnel, such as psychologists and speech therapists, who are crucial for supporting students with special needs. The presence of the teacher alone is insufficient for the successful integration of these children, who require support from various professionals to effectively address their diverse needs. Additionally, the shortage of both material and pedagogical resources presents a substantial obstacle to effective teaching and learning. The lack of support personnel further exacerbates this situation, as students with special needs require individualized assistance to thrive in the educational environment.

## **2.6 Interpretation of the Results**

According to the above data and the results of analysis, researchers found that most of the teachers agree that there is not a large number of students integrated annually in regular classes, so we asked about the percentage of integration compared to the maximum years of adapted education, which is a maximum of two years in the questions 10 and 11, and we add to this the information taken from the parents in Parents' questionnaire about the number of integrated kids in the family, we find that their children have never been integrated before and this was clarified in the last question of the questionnaire., i.e. the maximum number of integrated students one student and should be reviewed by the relevant and responsible authorities for adapted education, which is the Directorate of Social Activity in Naama, along with the authority responsible for school integration in standard sections that offer facilities in educational institutions for practicing adapted education, which is the Directorate of Education in Naama . hence, from the analysed data, researchers concluded that the first hypothesis, which assumes that most of the students in the adapted classes have chances to be integrated in normal classes after years of adaptation and treatment is not confirmed.

As for the second hypothesis, in which we assumed that the teacher of adapted education has undergone training in the field of specialization and has a broad background on what adapted education is and how to deal with these groups who suffer from learning difficulties,

whether light or heavy or suffer from mental or motor retardation, and this hypothesis was proven to be true, and what confirms this, is the questions addressed to the teachers in the directed interview, which focused on certain inquiries pertaining to the strategies used in special classes to reduce the difficulties that hinder learning and help facilitate comprehension and understanding, as well as the techniques he/her uses to stimulate memory. The researchers also asked the teachers few questions through teachers' questionnaire, represented by the number of years of experience, educational level, In addition to the knowledge gained from completing successful teacher training at the National Center for the Training of Specialized Employees in Institutions for the disabled - Constantine - which consequently provides them with all curricula and guides for teachers for all school subjects and activities used. The researchers also note the opinions of some parents about the noticeable improvement in their children, This highlights the teacher's effectiveness as they fulfill the roles of educator, instructor, and, when needed, psychologist.

Moreover, the significance of adaptive education and its function in supporting and aiding children facing diverse developmental and academic challenges has been discussed. In this section, various questions have been asked from both questionnaires for teachers and parents. Questions have been asked to teachers about the effectiveness of adaptive education in developing basic academic skills in education, such as reading and writing In question 15, and also some of the questions addressed to parents about any improvement in their children and their satisfaction with the special divisions, most of the answers were affirmative in questions 9 and 10. Furthermore, this substantiates the validity of the third hypothesis.

Overall, this findings leads researchers to answer the research problem, in which the children with LDs can achieve certain level of success and changment in their behavior and academic skills such as writing and reading after period of supporting them with all activities and practices can help them engage with learning, but there remains a problem of reintegration with normal classes which relies on standards conditions.

## **2.7 Research Limitation and Restriction**

This research has faced many restrictions and limitations that have not allowed researchers to expand the data collection procedures. Further, as a first limitation , which is the insufficient time to carry out the data collection on the widest points, and second, the permit paper that involves entering one institution, not several institutions or shcools, which

has made the sample small perhaps,. And in terms of time, is not enough to attend all the first sessions, because of the spring holidays, and since the researchers were doing the search in adaptive classes, their timing is slightly different than normal classes. Additionally to the small number of adaptive classes in the region of Mecheria that pertains to our subject matter concerning developmental disabilities. Besides, this research needs more and visits to several places concerned with this topic for more collecting data and gathering a largest number of information to expand further in order to answer all the questions that researchers are interested in.

## **2.8 Suggestions and Recommendations**

Based on data gathered by specialized professors and observations forming the basis of the research, several recommendations have been formulated. These suggestions aim to enhance the adapted education process, boost school integration rates, and enhance the psychological and behavioral well-being of students facing developmental and academic challenges. The recommendations include:

- First and foremost, it is necessary or advisable to include pre-school sections from the age of four to five years old to follow up children with difficulties, modify their daily behaviors, teach them the general rules and exercise them more to prepare them well to enter the school environment, and subsequently incorporate them into adapted classes to facilitate tailored learning experiences.
- Second, the need to establish adequate specialized facilities and increase the number of specialists such as psychologists, speech therapists, daily living companions, pedagogical specialists and sports teachers to facilitate the interview process with the professor and achieve an adapted workflow, thereby increasing the success rate and academic integration.
- Third, the need to modify and simplify the curriculum of adaptive education to suit the intellectual and cognitive ability and rate of mental assimilaion of the affected child in order to facilitate understanding and assimilation in a smooth manner and in a short period of time, and to ease the work of the specialized teacher and increase productivity, which in turn is an essential factor in the learning and teaching process.

- Fourth, the inclusion of some recreational activities, such as drawing, plays, comics, that improve the psyche of the child who suffers from various difficulties and also the inclusion of religious classes for their psychological and moral benefit.
- Fifth, consideration must be given to the sample selected in the adaptive classroom, as samples of students with severe difficulties and disorders are mixed with samples with mild difficulties, which affects the latter sample, resulting in a decrease in productivity and great effort by the teacher, which hinders the process of integration and success.
- Sixth, care must be given not to isolate students for a long time in the adaptive classroom, but to take them out on outings and during school breaks to reduce social isolation and increase their contact with regular students so that they do not feel any lack.
- Last but not least, take into account the adaptation of special classes in all aspects in the Naama region as a whole and provide the classes with all audio-visual aids as well as games to help focus and improve writing and reading.

the recommendations provided offer actionable steps to address various aspects of the issue of learning disabilities and the role of adaptive education . By implementing these suggestions, stakeholders can work towards mitigating challenges and fostering positive outcomes.

## **2.9. Conclusion**

To conclude this chapter, the methodology is the main section in the research in promoting the theoretical part, In this chapter the researchers collect all the information related to the issue of the study, which is the impact of developmental disabilities on the the academic acheivement and the role of the adaptive education in providing pupils with disabilities with all the helps and treatment to overcome their difficulties and also providing teachers with all guidance and materials to help this categories of children , all this collecting data based on the use of multiple methods and approaches, maintaining the qualitative and the quantitaive methodologies to obtain an exact result and making the research valid and reliable .

# **General Conclusion**

## **General Conclusion**

In a school full of differences, the educational system seeks to contribute to learners with specific intellectual disorders by giving them the chance to integrate with their peers, not to forget mentioning the support provided by the teachers. This study strives to explore developmental disabilities and their influence on educational achievement by shedding light on adaptive education, which in turn offers the possibility of integration for learners with learning disabilities (LDs), notably highlighting the teacher's role in bringing this to fruition.

The data revealed a striking observation that the majority of participants agreed that developmental disabilities hinder learning achievement. Integration appears beyond reach, as there is strong agreement that the adaptive curriculum does not meet the necessary standards and is beyond the learners' level. Teachers, in their turn, offer considerable effort and time in providing their learners with essential support and guidance by using multiple strategies, regardless of the obstacles presented by the adaptive education curriculum.

Through the use of triangulation (observation, interview, and questionnaire), it is revealed that children with LDs, despite being enthusiastic learners and receiving assistance from their teachers, find integration unattainable due to a range of educational, social, and family factors that do not reinforce their ability to learn. Additionally, the lack of supervision from competent authorities and the absence of professional specialists in speech, pedagogical support, and psychology at Aslaoui Mohammed Primary School in Mecheria, Naama region, are significant barriers.

Consequently, some solutions are suggested to enhance adaptive education, such as the necessity of including pre-school sections to address the difficulties faced by learners, ensuring a sufficient number of specialists to facilitate the process of identification and continuous monitoring. Moreover, simplifying the adaptive educational system to suit the learners' intellectual abilities and improving the teaching process is crucial.

Researchers in this study seek to explore LDs from various standpoints while introducing adaptive education and highlighting its approaches and challenges encountered by learners

and teachers. Therefore, the concept of integration arises and is provided in a practical framework that offers insightful results for future researchers.

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2022 التعليم المكيف و دوره في ادماج المتأخرين دراسيا دراسة ميدانية في ابتدائيات ولاية جيجل بوضيعة مروة بوتور وثام

BENKHETTOU, F. (2023) *From Policy to Practice: Investigating Algerian University Teacher's Language Challenges and Training Needs to Inform Effective EMI Implimentation in Higher Education Institutions. The Case of teacher's at Salhi Ahmed University Center Naama. [Master's thesis]*

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# Appendices

## Appendix.1

### Classroom Observation taking- notes

**Date:** from 11<sup>th</sup> , march to 20<sup>th</sup> , march 2024

**Lesson title:** writing and reading

**session:** Arabic and English

**Time:** 45 minutes

**Grade:** third year/ fourth year

**Primary school:** Aslaoui Mohamed

	Observation items	yes	No	Potentially	Description
A	<b>Teacher student interaction</b>				
	Pupils interact with the teacher during the lesson				
B	<b>Classroom engagement</b>				
	Classroom well organized				
	Does the teacher can manage the classroom				
	Does the teacher uses effective methods				
c	<b>Classroom atmosphere</b>				
	Are children with LDs friendly				
D	<b>The adaptive education curriculum</b>				
	Books used in the adaptive classroom				
	Is the teacher well qualified to dealing with the curriculum				

## Appendix 2

### Observation during the Exam

	Observation	Yes	No	Pont-ially	Description
<b>A</b>	<b>Teacher –student interaction</b>				
	Teacher providing help for pupils during the exam session				
	Pupils answering individually				
<b>B</b>	<b>Teacher Method used</b>				
	The teacher is selective				

## Appendix 3

### Teachers' Questionnaire

Dear Participant,

Thank you for taking the time to participate in this survey. Your valuable input is crucial for our research. This questionnaire aims to gather information on the adaptive education classrooms and about children with learning disabilities. Your responses will contribute to explain the impact of developmental disorders on the academic achievement as well as the important of the adaptive education and its impact on children.

To ensure your privacy and confidentiality, we want to assure you that Your responses will be kept completely anonymous. At no point will your individual responses be identifiable to anyone. We will not collect any personally identifiable information such as your name, email address, or other contact details.

#### **Section One: primary information**

- 1- Gender: male  female
- 2- Academic level: Bachelor  Master
- 3- Year of experiences: one year  two year  three year  more than three

#### **Section Two: information about adaptive classroom**

- 4- number of pupils in each class .....
- 5- does all pupils suffer from poor concentration? Yes  No
- 6- number of pupils who suffer from distraction one  two  three  all   
no one
- 7- does all pupils suffer from hyperactivity? Yes  No
- 8- does hyperactivity influence the concentration of pupils during the lecture ? yes  No
- 9- how many pupils who suffer from poor memory and forgetfulness?  
Third year : One  Two  All  No one   
Forth year: One  Two  All  No one

#### **Section N°3: The adaptive classrooms' challenges**

- 10- what is the maximum for years of study in the adaptive classroom?  
One year  two years  more than two years
- 11- what is the pourcentages of integration of pupils within the normal classes ?  
1%  5%  50%  100%  none

12- does the developmental disorders influence the percentage of success and hinder the process of academic integration? Yes  No

-If the answer is yes, state some of them depending on what challenging you in classroom....

.....  
.....  
.....

**Section N°04: the teacher's challenges in adaptive classroom**

13- does the curriculum affect you ? Yes  No

-In both cases justify your answers.....

.....  
.....

14-does the adaptive education in the welaya of Naama succesful and meets its intended purpose? Yes  No

15- the adaptive education play a crucial role in enhancing the reading and writing skills and such negative behavior change?

Strongly disagree  disagree  neutral  agree  strongly agree

16- does the region of Naama are met all the conditions of adapted education?

Yes  No

Justify your answers in both cases .....

.....  
.....  
.....

Thank you for your participation.

## Appendix 4

### Parent's questionnaire

Thank you for taking the time to participate in this survey. Your valuable input is crucial for our research. This questionnaire aims to gather information on the adaptive education classrooms and about children with learning disabilities. Your responses will contribute to explain the impact of developmental disorders on academic achievement as well as the importance of adaptive education and its impact on children.

To ensure your privacy and confidentiality, we want to assure you that your responses will be kept anonymously. At no point will your individual responses be identifiable to anyone. We will not collect any personally identifiable information such as your name, email address, or other contact details

#### Primary data:

1. Gender: Male  Female

2. How many children with Learning disabilities do you have in your family?

One child  two children  three children  more than three

3. How old was your child when you discovered he/she had mental difficulties?

1 year  2 years  3 years  4 years  more than 4 years

4. Are you experiencing any social stress due to your child's mental disabilities?

Yes  No

5. If "yes" state some of them

.....  
.....  
.....  
.....

6. How do you deal with your child's distraction?

.....  
.....  
.....

7. In your point of view, does the curriculum suit your child's mental abilities in the special classroom?

Yes  No

8. Have you noticed any significant improvement in your child's behavior, as well as in writing and reading skills?

Yes  No

9. If yes, choose the improvement percentages :  
10%  20%  50%  100%

10. What kind of support do you provide for your child to help in his\her writing and reading skills?

.....  
.....  
.....

11. Are satisfied about these special classes for this category of children?

Yes  No

12. Has any child in the family with learning difficulties succeeded in integrating into regular classes?

Yes  No

13. What do you suggest as a solution in order to enhance the success and the positive change in your child's learning disabilities within adaptive education?

Thank you for your participation.

## Appendix 5

### Adaptive classroom teachers' Interview

**Primary School :** Aslaoui Mohamed

**Classes:** Third year and Fourth year

**Number of Teachers :** 03 ( English , Arabic)

Questions Organized and ordred for all teachers in the same way

#### Questions:

- **Question1:** as a teacher of adaptive classroom, what are the challenges that you face?
- **Question2:** How is this group of students dealt with to reduce or minimize the rate of forgetfulness and distraction in the classroom?
- **Question3:** As a teacher, what do you suggest to increase the success rate and consequently the integration rate?
- **Question4:** Based on your opinion, does the region of Naama in general, and El Mecheria in particular, meet all the requirements for adaptive education?

## Appendix6

### Developmental and Academic Disabilities in each Pupil

#### Third class pupils

<b>pupils</b>	<b>distractio n</b>	<b>Poor memory</b>	<b>forgetfuln ess</b>	<b>Attention deficit</b>	<b>hyperacti vity</b>	<b>Reading difficulty</b>	<b>Writing difficulty</b>
<b>Y</b>							
<b>As</b>							
<b>I</b>							
<b>S</b>							
<b>Ib</b>							

**Fourth year pupils**

<b>pupils</b>	<b>distractio n</b>	<b>Poor memory</b>	<b>forgetfuln ess</b>	<b>Attention deficit</b>	<b>hyperacti vity</b>	<b>Reading difficulty</b>	<b>Writing difficulty</b>
<b>Is (14 years old )</b>							
<b>An (17 year old)</b>							
<b>J (17 year old)</b>							
<b>M</b>							
<b>Y</b>							

## Appendix 7

### Teacher's Guide in Arabic Language



الجمهورية الجزائرية الديمقراطية الشعبية  
وزارة التضامن الوطني والأسرة وقضايا المرأة

المركز الوطني لتكوين المستخدمين المختصين بعؤسسات المعوقين

- قسنطينة -



الجنة الوطنية لإعداد الوثائق التربوية الخاصة  
بالأطفال المعاقين ذهنيا درجة خفيفة - القسم الخاص -

## دليل الأستاذ في اللغة العربية

- الطور الثاني- سنة رابعة قسم خاص

إعاقة ذهنية درجة خفيفة

مارس 2021

## Appendix 8

### Example of Curriculum Agenda for The Teacher

المتطوع التعليمي: التيمم الإنسانية		
<p><b>الميدان</b> <b>النشاط</b> <b>المدة</b> <b>الوحدة</b> <b>مركبة</b> <b>الكفاءة</b></p>	<p>التعبير الكتابي أدرب على الإنتاج الكتابي 90د 11 يتعرف على مختلف أشكال الحروف والضوابط للكتابة بالعربية ويتبع منصوصات حسب وضعية التواصل</p>	<p><b>مؤشرات</b> <b>الكفاءة</b> <b>الكفاءة</b> <b>الختامية</b> <b>التيمم</b></p> <p>ينظم إنتاجه وفق نمط النص السردى، ويحترم قواعد اللغة يتبع كتابة نصيما من أربعة إلى ستة أسطر من مختلف الأنماط، مع التركيز على النمط السردى فى وضعيات تواصلية دالة يستخرج المعلومات ويوظفها فى التعبير الشفوي والكتابي، ينمى قدراته التعبيرية</p>
المراحل	الوضعيات التعليمية والنشاط المنتج	التنويم
<p><b>مرحلة</b> <b>الانطلاق</b></p>	<p>حكيت لك جدتك قصة. أعددها على مسامعنا.</p>	<p>يتذكر أحداث قصة (حقيقية/خيالية) وعيد سردها.</p>
<p><b>مرحلة</b> <b>بناء</b> <b>التعلم</b></p>	<p><b>تقديم القصة</b> يتقدم الأستاذ القصة بعد قراءتها بالتنظيم المناسب (دقتر الأنشطة ص 7). يطلب من التلاميذ قراءتها قراءة صامتة. بعد القراءة الصامتة يطلب منهم ملء الجدول.</p> 	<p>يحدد شخصيات القصة، مكان القصة وزمنها، المشكلة.</p>
<p><b>التدريب</b> <b>والاستثمار</b></p>	<p>يطلب من التلاميذ اقتراح حلول للمشكلة وكتابتها على دقتر الأنشطة</p>	<p>تنويم الإنجاز.</p>

## ملخص

تركز هذه الدراسة على صعوبات التعلم ودور التعليم الخاص في منطقة النعامة. ويهدف إلى تحديد أنواع صعوبات التعلم التي يواجهها الطلاب، وتقييم تأثيرها على المخرجات التعليمية وتقييم أثرها على الاندماج المدرسي. ويتضمن البحث فصلاً نظرياً يناقش العديد من المصطلحات والمفاهيم ذات الصلة، مستعيناً بمصادر متعددة لتحديد ما إذا كانت منطقة النعامة توفر تعليماً ملائماً ومكيفاً مناسباً أو تعاني من نقص في الموارد. وتكشف النتائج عن أنواع صعوبات التعلم في المنطقة ومدى انتشارها وأثرها السلبي على مخرجات التعليم والاندماج المدرسي. واستناداً إلى هذه المعلومات، تقترح الدراسة توصيات لتحسين التعليم الخاص في منطقة النعامة من أجل تحسين المخرجات التعليمية للطلاب الذين يعانون من صعوبات التعلم

## Résumé

Cette étude porte sur les difficultés d'apprentissage et le rôle de l'enseignement adapté dans la région de Naama. Elle vise à identifier les types de difficultés d'apprentissage auxquelles les élèves sont confrontés, à évaluer leur impact sur les résultats scolaires et à évaluer leur effet sur l'intégration scolaire. La recherche comprend un chapitre théorique qui discute de divers termes et concepts liés, en utilisant des sources multiples pour déterminer si la région de Naama fournit un enseignement adapté adéquat ou souffre d'un manque de ressources. Les résultats révèlent les types et la prévalence des difficultés d'apprentissage dans la région et leur impact négatif sur les résultats scolaires et l'intégration à l'école. Sur la base de ces informations, l'étude propose des recommandations pour améliorer l'enseignement adapté dans la région de Naama afin d'améliorer les résultats scolaires des élèves ayant des difficultés d'apprentissage.

## Summary

This study investigates learning difficulties and the role of adapted education in the Naama region. It aims to identify the types of learning difficulties students face, evaluate their impact on academic achievement, and assess their effect on school integration. The research includes a theoretical chapter that discusses various related terms and concepts, using multiple sources to determine if the Naama region provides adequate adapted education or suffers from a lack of resources. The findings reveal the types and prevalence of learning difficulties in the region and their negative impact on academic performance and school integration. Based on these insights, the study offers recommendations for improving adapted education in the Naama region to enhance educational outcomes for students with learning difficulties.