

Teaching Strategies for Students with Learning Disabilities (LD): Second and Fourth Grade at Thamer Mabrouk Primary School in M'sila-Algeria as a Case Study

الاستراتيجيات التعليمية للتلاميذ ذوي صعوبات التعلم: دراسة حالة السنة الثانية والرابعة في المدرسة الابتدائية ثامر مبروك بالمسيلة - الجزائر

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Abstract:

The inclusion of students with special needs in mainstream education has been a significant focus, aiming to provide them full access to educational materials and social interactions. Despite the desire to include students with disabilities, teachers often lack the skills to address their needs effectively. This research aims to enhance educators' understanding of strategies for successful inclusive classrooms. It explores various teaching techniques to foster such environments. Consequently, the objective of this research is to explore various teaching techniques that educators can employ to foster a thriving inclusive classroom. This study aimed to answer the following research questions: What is a learning disability? What causes a learning disability? What are

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the characteristics of a student with a learning disability? And How can teachers ensure the successful integration of students with disabilities?. To gather data for this research, an analysis of academic literature and observations in two primary school classes was conducted. The study's findings highlighted that well-informed teachers utilize a range of teaching methods, including initial preparations and readiness. Similar to learning a new language, these strategies seamlessly integrate into contemporary discussions on effective teaching and learning. A specific set of guidelines, including working together with teaching assistants and other methods, can contribute to the academic achievement of children with special requirements.

Key words: Inclusion classrooms, learning disabilities, Teaching strategies.

-Abstract in French:

L'inclusion des élèves en situation de handicap dans l'éducation ordinaire a été un enjeu majeur, visant à leur offrir un accès complet aux matériaux pédagogiques et aux interactions sociales. Malgré le désir d'inclure les élèves handicapés, les enseignants manquent souvent des compétences nécessaires pour répondre efficacement à leurs besoins. Cette recherche vise à améliorer la compréhension des enseignants des stratégies permettant d'assurer le succès des classes inclusives. Elle explore diverses techniques pédagogiques pour favoriser de tels environnements. Par conséquent, l'objectif de cette étude est d'explorer les différentes techniques pédagogiques que les enseignants peuvent utiliser pour favoriser une classe inclusive prospère. Cette étude visait à répondre aux questions de recherche suivantes : Qu'est-ce qu'un trouble d'apprentissage ? Quelles sont les causes d'un trouble d'apprentissage ? Quelles sont les caractéristiques d'un élève ayant un trouble d'apprentissage ? Et comment les enseignants peuvent-ils garantir une intégration réussie des élèves handicapés ? Pour collecter des données, une analyse de la littérature académique et des observations dans deux classes de l'école primaire ont été réalisées. Les résultats de l'étude ont mis

en évidence que les enseignants bien informés utilisent une gamme de méthodes pédagogiques, y compris des préparations initiales et une bonne préparation. Comme pour l'apprentissage d'une nouvelle langue, ces stratégies s'intègrent parfaitement dans les discussions contemporaines sur l'enseignement et l'apprentissage efficaces. Un ensemble spécifique de lignes directrices, y compris le travail avec des assistants pédagogiques et d'autres méthodes, peut contribuer à la réussite académique des enfants ayant des besoins spéciaux.

Mots clés : Classes inclusives, Stratégies pédagogiques, Trouble d'apprentissage.

- Abstract in Arabic:

لقد كانت شمولية الطلاب ذوي الاحتياجات الخاصة في التعليم العام محور اهتمام كبير، بهدف توفير الوصول الكامل لهم إلى المواد التعليمية والتفاعلات الاجتماعية. وعلى الرغم من الرغبة في دمج الطلاب ذوي الإعاقات، غالباً ما يفتقر المعلمون إلى المهارات الالزمة للتعامل مع احتياجاتهم بفعالية. تهدف هذه الدراسة إلى تعزيز فهم المعلمين لاستراتيجيات التي تساهم في نجاح الفصول الدراسية الشاملة. تستكشف هذه الدراسة تقنيات التدريس المختلفة لتعزيز بيئة تعليمية شاملة. وبناءً على ذلك، تهدف هذه الدراسة إلى استكشاف تقنيات التدريس التي يمكن أن يستخدمها المعلمون لتعزيز بيئة شاملة ومزدهرة. هدفت هذه الدراسة للإجابة على الأسئلة البحثية التالية: ما هي الإعاقة التعليمية؟ ما هي أسباب الإعاقة التعليمية؟ ما هي خصائص الطالب ذي الإعاقة التعليمية؟ وكيف يمكن للمعلمين ضمان دمج ناجح للطلاب ذوي الإعاقات؟. لجمع البيانات لهذه الدراسة، تم إجراء تحليل للأدبيات الأكademie وملحوظات في فصلين دراسيين في مدرستين ابتدائيتين. أظهرت نتائج الدراسة أن المعلمين المطلعين جيداً يستخدمون مجموعة من أساليب التدريس، بما في ذلك التحضير الأولى والاستعداد. مماثل لتعلم لغة جديدة، تتكامل هذه الاستراتيجيات بشكل سلس في المناقشات المعاصرة حول التدريس والتعلم الفعال. يمكن أن تسهم مجموعة محددة من الإرشادات، بما في ذلك التعاون مع المعاونين التدريسيين وأساليب أخرى، في تحقيق النجاح الأكاديمي للأطفال ذوي الاحتياجات الخاصة

كلمات مفتاحية : التعلم الإعاقى، الفصول الدراسية الشاملة، استراتيجيات التدريس

1. Context of the Study

1.1. Background to the Study

Students with learning disabilities (LD) make up the largest segment of students with special needs, representing 46% of the special education population and 5.9% of overall school enrollment (U.S. Department of Education, 2001). The number of students identified with LD has steadily increased over the past 25 years, more than tripling since 1976. LD significantly impacts various aspects of a child's life, posing lifelong challenges (Lerner, 2000). These students often face a cycle of school failure, which slows their academic progress and increases their risk of falling behind (Stanovich, 1986). Consequently, nearly 70% of students with LD fail to graduate with a standard high school diploma and have lower participation in postsecondary education and employment compared to their peers (Murray, Goldstein, and Edgar, 1997). Addressing the academic achievement of students with LD is crucial to improving their educational outcomes.

1.2. Statement of the Problem

The study under investigation revolves around identifying and implementing effective teaching strategies tailored to learners with disabilities. Despite the growing recognition of inclusive education, there is a lack of comprehensive understanding and

guidance on how to best accommodate diverse learning needs. This issue is compounded by a dearth of research-backed practices and resources that address the specific challenges faced by educators in providing an equitable and supportive learning environment. As a result, educators encounter difficulties in adapting their instructional methods to suit the diverse needs of students with disabilities, potentially hindering their academic progress and overall well-being. Addressing this problem is crucial to fostering an inclusive educational landscape that maximizes the potential of all learners.

1.3. Research Objectives

The main objectives of the present study are:

- 1- To explore diverse teaching strategies for teachers to enhance effective enrollment of impaired students in their classrooms.
- 2- To determine the impact of these strategies on the academic and socio-emotional development of disabled learners.
- 3- To see how collaboration between educators, parents, and specialists can optimize the learning environment for disabled learners.

1.4. Research Questions

RQ1. What is a learning disability?

RQ2. What causes a learning disability?

RQ3. What are the characteristics of a student with a learning disability?

RQ4. How can teachers ensure the successful integration of students with disabilities?

2. The Theoretical Framework

2.1. Definition of the term (A learning disability)

According to Graham and Harris (1996, p. 2), LD has been officially recognized as a disability category in federal law since 1975 through the Individuals with Disabilities Education Act (IDEA). However, defining LD has been a contentious issue, as various organizations propose different definitions that significantly vary. The diversity among students identified as LD adds to the complexity, as they exhibit a wide range of academic, behavioral, and social-emotional challenges, which may differ both within and across these areas. For instance, while some students struggle with reading but excel in mathematics, others may experience difficulties in mathematics but not reading. Additionally, some students may have issues with self-esteem or depression, while others exhibit serious behavioral problems. The multidisciplinary nature of LD, involving education, psychology, medicine, and sociology, further contributes to the confusion. Each field offers a distinct perspective on LD, resulting in differences in terminology and what aspects of LD should be included in the definition, akin to the metaphor of blind men describing an elephant from different angles.

2.2.1. Individuals with Disabilities Education Act (1977)

The term "specific learning disability" refers to children who experience a disorder in one or more of the fundamental psychological processes involved in understanding or using language, whether spoken or written. This disorder may manifest as an imperfect ability to listen, think, speak, read, write, spell, or perform mathematical calculations. Specific learning disabilities encompass various conditions such as perceptual handicaps, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. However, it is essential to note that the term does not include

learning difficulties primarily caused by visual, hearing, or motor handicaps, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantages (Graham and Harris, 1996, p. 3).

2.2.2 Association for Children with Learning Disabilities (1986)

Specific Learning Disabilities (SLD) is a chronic condition believed to have neurological origins, causing selective disruptions in the development, integration, and/or expression of verbal and/or nonverbal abilities. SLD is considered a distinct handicap and can vary in its presentation and level of severity. This condition can have long-term effects on self-esteem, education, career opportunities, social interactions, and daily functioning (Graham and Harris, 1996, p. 3).

2.2.3. Interagency Committee on Learning Disabilities (1987)

Learning disabilities is a broad term used to describe a diverse range of disorders characterized by significant challenges in acquiring and utilizing skills related to listening, speaking, reading, writing, reasoning, mathematical abilities, or social skills. These difficulties are inherent to the individual and believed to stem from central nervous system dysfunction. It's important to note that while a learning disability may coexist with other conditions like cultural differences, inadequate instruction, psychogenic factors, or attention-deficit disorder, the learning disability itself is not directly caused by those factors or influences (Graham and Harris, 1996, p. 3).

2.2.4 National Joint Council on Learning Disabilities (1997)

Learning disabilities encompass a diverse range of disorders marked by significant challenges in acquiring and utilizing skills related to listening, speaking, reading, writing, reasoning, or mathematical abilities. These difficulties are inherent to the

individual and are believed to arise from central nervous system dysfunction, potentially persisting throughout life. While learning disabilities may coexist with problems in self-regulatory behaviors, social perceptions, and interactions, these alone do not constitute a learning disability. Additionally, learning disabilities might occur alongside other disabilities, such as sensory impairment, mental retardation, or serious emotional disturbance, or be influenced by external factors like cultural differences or inadequate instruction. However, it is important to note that the learning disability itself is not caused directly by these coexisting conditions or external influences (Graham and Harris, 1996, p. 3).

2.2. Causes of learning disabilities

For over fifty years, researchers have explored the possible causes of learning disabilities (LD), although no single cause has been definitively identified (Graham and Harris, 1996, p.4). Hypotheses about LD include central nervous system abnormalities, such as unusual brain hemispheric symmetry and nerve cell issues in language-processing areas. Another proposed cause is damage to the central nervous system, which may occur in prenatal stages due to maternal drug use, smoking, or fetal alcohol exposure; in perinatal stages through complications like prematurity or anoxia; or postnatally as a result of injury from stroke, high fever, infections, or trauma. Genetic factors are also significant, with evidence linking reading disabilities to genetic inheritance and certain chromosomal abnormalities, like those seen in Klinefelter syndrome, Turner syndrome, and fragile X syndrome, leading to learning challenges. Environmental factors, such as exposure to heavy metals like lead, may play a role, along with biochemical imbalances in neurotransmitters like dopamine, serotonin, and

acetylcholine. While research continues to evolve, educators using these findings to inform their instructional decisions can better understand and support students with LD by identifying and addressing these potential influences (Graham and Harris, 1996, p.4).

2.2.1. Medical Perspectives

Historically, learning disabilities (LD) have been viewed as stemming from neurological deficits, with the brain as the primary source of learning challenges (Graham and Harris, 1996, p.5). Early researchers like James Hinshelwood (1917) introduced terms such as "word blindness" to describe reading difficulties, suggesting the angular gyrus region of the brain might be involved. In 1937, Samuel Orton (cited in Graham and Harris, 1996) observed letter reversals (e.g., b/d, p/q) in struggling readers, which he termed "strophosymbolia" or "twisted symbols," hypothesizing this was due to a lack of "cerebral dominance." Orton believed that without a dominant hemisphere, both sides of the brain might store mirror images of letters and words. This view persisted through the work of Kirk Goldstein (1936) and Alfred Strauss (1947), who linked perceptual and behavioral issues observed in brain-injured individuals and students with mental retardation to potential brain damage, coining terms like "brain-injured child" and "minimal brain dysfunction" (Graham and Harris, 1996, p.5). Although these labels were met with resistance, the medical perspective on LD endures today, with terms like "dyslexia" and "dyscalculia" continuing to describe specific learning challenges. Modern research, utilizing advanced tools, is progressively clarifying the brain's role in LD, as evidenced in studies such as Shaywitz's (2003).

2.2.2. Learning Disabilities as an Academic Problem

In 1963, a pivotal moment in learning disabilities (LD) history occurred at a Chicago meeting of concerned parents dissatisfied with medical terms like "brain injured" or "minimal brain dysfunction" for their children (Mercer, 1997). At this gathering, psychologist Samuel Kirk introduced the term "learning disabilities," redefining these challenges as issues in cognitive processes rather than brain damage. This shift suggested that students with LD had intact neurological functions but faced difficulties in perceptual processes, such as visual and auditory discrimination, which impacted learning (Graham and Harris, 1996, p.5). This new "perceptual-motor" approach moved focus from medical to academic aspects of LD, leading to assessment tools and interventions targeting underlying perceptual deficits. Programs included activities like walking balance beams to enhance motor skills and shape tracing for perceptual skills. However, these interventions proved largely ineffective, and the assessment tools were unreliable (Hamill and Larsen, 1974). Nevertheless, the idea that LDs could be addressed through instructional approaches persisted and influenced later practices in the field.

2.2.3. Behavioral and Cognitive Approaches

From the 1960s to the 1980s, influential perspectives on learning disabilities (LD) evolved, beginning with behaviorism, developed by B. F. Skinner. Behaviorists viewed learning as a hierarchical process, with skills mastered sequentially, and focused on adjusting the instructional environment. This led to structured methods like DISTAR (Engelman and Bruner, 1974) and Precision Teaching (Lindsley, 1964), which proved effective. In the 1970s, cognitive approaches emerged, focusing on how individuals

process information and identifying cognitive deficits (e.g., memory or ineffective strategies) as causes of learning difficulties (Mercer, 1997). The 1980s saw the rise of cognitive models, such as the information-processing model, which compared the mind to a computer (input, storage, and processing). These models informed instructional strategies like the University of Kansas learning strategies, which effectively addressed cognitive needs. The insights from this period continue to influence LD practices today (Graham and Harris, 1996).

2.3. Characteristics of students with learning disabilities

Educators need to have a good understanding of the traits exhibited by students with learning disabilities (LD). These traits encompass emotional, behavioral, cognitive, and social aspects of development. However, our focus here is on providing teachers with the specific information needed to effectively educate students with LD. Therefore, we will only discuss characteristics that directly impact academic performance.

2.3.1. Attention

Graham and Harris (1996, p.6-7) note that teachers of students with learning disabilities often observe that these students struggle with maintaining focus and that information seems to quickly fade. Attention is essential for learning and includes three main aspects. The first is task engagement the ability to stay focused and persist on academic tasks. Students with learning disabilities, however, are often on-task only 30-60% of the time when left unsupervised (Bryan and Wheeler, 1972; McKinney and Feagans, 1983), which hinders skill development and can lead to negative experiences in the classroom (Hallahan, Kauffman, and Lloyd, 1996). These students are frequently

described as "distractible" or "not with it." The second aspect is **selective attention**, or the ability to identify relevant information. According to Brown and Wynne (1984), students with LD often struggle to distinguish between essential and irrelevant parts of a task, focusing on unnecessary details and missing crucial information. While the exact causes of these attention issues are unclear, research suggests that strategic instruction can improve focus, task engagement, and selective attention, helping students learn more effectively (Graham and Harris, 1996, p.6-7).

2.3.2. Memory

According to Graham and Harris (1996, p.7-8), teachers working with students with learning disabilities (LD) often note that these students can recall information one day but seem to forget it the next, posing significant challenges for academic success. Memory issues can impact essential learning, such as math facts, spelling, or content knowledge, and students with LD face more memory problems than their peers (Gettinger, 1991; Swanson, Cochran, and Ewers, 1990), which are linked to academic struggles (Ceci, Ringstorm, and Lea, 1981). Previously, these memory deficits were thought to be due to inherent limitations, depicted by a metaphorical "bucket" that is smaller and leakier. However, memory challenges in students with LD are often influenced by factors like background knowledge, which aids memory; students with LD tend to have lower background knowledge, affecting retention. Additionally, memory problems may not be solely due to deficits but rather the lack of memory-enhancing strategies like chunking or verbal elaboration, which skilled learners use intuitively. Strategy instruction that includes memory-enhancement techniques can

address these challenges, helping students with LD improve their recall and learning outcomes (Graham and Harris, 1996, p.7-8).

2.3.3. Attributions

Attributions refer to how students explain the reasons behind their academic outcomes (Graham and Harris, 1996, p.8). For example, a successful student might attribute a good grade to their hard work, which reflects a healthy attribution pattern where success is linked to controllable factors like effort. Attributions are important because they influence students' expectations for success, their academic behaviors, and their responses to success and failure (Weiner, 1979). However, students with learning disabilities often attribute their success to external factors, such as luck or an easy test, while blaming their failures on internal, uncontrollable factors like lack of ability or task difficulty (Chapman, 1988; Kistner, Osborn, and LeVerrier, 1988; Stipek, 1993). This pattern, where success is externalized and failure internalized, can harm motivation and academic performance. Strategy instruction seeks to address this by fostering more positive and adaptive attribution patterns in students.

2.3.4. Learned Helplessness

Learned helplessness occurs when individuals believe their efforts will not lead to success, leading them to give up trying (Graham and Harris, 1996). Students with this mindset often attribute their past failures to a lack of ability and believe they are incapable of success (Dweck, 1975). Even when they succeed, they may attribute it to external factors, like an easy teacher, rather than their own efforts. This undermines their academic motivation. Research shows that learned helplessness is common

among students with learning disabilities (LD), with up to 70% of students with LD showing signs of this mindset (Kavale and Forness, 1996).

2.3.5. Lack of Coordinated Strategies

Skilled learners instinctively adjust their pace and monitor their comprehension, taking corrective actions when needed (Graham and Harris, 1996). However, students with learning disabilities (LD) often struggle with these cognitive strategies. They may not recognize the need to adjust their study habits, such as slowing down during complex material, and often fail to monitor their comprehension or identify difficulties (Bauer, 1987; Wong and Wilson, 1984). Even when problems are noticed, selecting an effective solution is challenging. Common difficulties for students with LD include: 1) difficulty organizing mental processes, 2) ineffective use of strategies, 3) poor self-regulation of mental activities, and 4) limited awareness of which strategies to use for a given task (Swanson, 1993). As a result, they often fail to employ strategies that could enhance their learning and may not recognize the need for them (Owings et al., 1980).

3. Methodology

Integrating children with special needs into a regular classroom setting holds significant importance. Qualitative research has been utilized in various disciplines like sociology, history, and anthropology. According to Miles and Huberman (2009), qualitative data provide comprehensive descriptions and explanations of processes in specific local settings. Through qualitative data, it becomes possible to maintain the chronological sequence of events, closely observe the cause-effect relationships, and generate valuable insights. Qualitative methodologies focus on elucidating human behavior within its social context. The aim of this study was to examine diverse

instructional techniques that teachers could employ in their classrooms to enhance student enrollment.

3.1. Procedures

This research uses a qualitative observational approach, focusing on systematic data collection through visual and auditory observation (McKechnie, 2008). The researcher observed two classrooms at Thamer Mabrouk Primary School in M'sila, Algeria. Initially, the researcher joined a fourth-grade class in September, observing once a week for three months, then transitioned to a second-grade class in March. Each week, the researcher spent two to four hours in the classrooms, conducting three observations per term, documenting findings with written notes and audio recordings.

3.2. Participants

This study focused on two educators working with students with disabilities in regular classroom settings in M'sila, Algeria. The researcher used convenience sampling, a non-random method where participants are selected based on practical criteria like accessibility and availability (Dörnyei, 2007). The fourth-grade teacher, Ms. X, has seven years of teaching experience, with three years in first grade and four years in fourth grade. The second-grade teacher, Ms. Y, has fifteen years of teaching experience, all in second-grade classrooms. While ideally, the entire population would be studied, practical constraints often make this unfeasible, prompting researchers to use convenience sampling when the population is small or limited (Explorable.com, 2009). The researcher chose this sampling method because of the teachers' availability and willingness to participate at the time of observation.

3.3. Data Analysis

The data were analyzed through thematic analysis to observations, along with the researcher's examination of existing literature. Thematic analysis, a qualitative technique, involves examining a dataset to identify recurring patterns, comprehending them, and then presenting the findings (Braun and Clarke, 2006). This approach serves as a means of presenting data while also involving interpretation in the process of selecting codes and shaping themes. Furthermore, the researcher examined their comparison and literature review to identify common themes and distinctions.

4. Findings and Discussion

The findings of this study were derived from a thematic examination of observed instances. A pair of classrooms were subject to observation, with their selection being based on the researcher's designated fieldwork venues. These findings contributed to addressing the research query. Within this section presenting the results, the researcher has emphasized notable aspects of the observations.

Table N°1. Observation Schedule

Field Work Monitoring			
Observation	Time	Grade	Topic
One	9.30AM-11.30AM	Fourth	Introduction of Students

The researcher conducted fieldwork in a fifth-grade classroom that practices inclusion. Within this classroom, two students have ADHD diagnoses, one has a speech impairment, and another has an intellectual disability. Among these students, "Mohamed" who has an intellectual disability, became the focal point of my observations. The researcher directed her attention toward Mohamed, the student with an intellectual disability. On this particular day, the researcher noted that Ms. X., the teacher, did not deliver a specific lesson. Instead, she engaged the students in creating their own introductions. The students were the primary focus, and the introductions proceeded smoothly. She hardly interacted with "Mohamed" during the speeches, only briefly approaching him. While she was expected to be seated with crossed legs, he chose to position his legs in front of him, encroaching on someone else's space. Another student requested "Mohamed" to adjust his legs, but he declined. I attempted to convince "Mohamed" to sit cross-legged, but he disregarded me due to unfamiliarity.

Regarding the inclusion of students with special needs in her class, I perceived the teacher to display confidence. She periodically checked on "Mohamed" without being intrusive. She communicated with him at his level, ensuring his engagement while respecting his independence. The teacher treated "Mohamed" on par with the other students, embodying the essential approach for inclusive classrooms. Even though certain students might require extra support, the instructor should avoid concentrating solely on one student among thirty others. The teacher adeptly distributed her time and attention among all the children. Once all the students have entered the classroom, the teacher instructs them to get their homework folders. While the other students retrieve their folders, "Mohamed" raises his hand. The teacher comes over

and stands in front of his desk. He explains that his homework folder is still in his backpack outside the classroom. The teacher tells him that he should always bring his folder with him when entering the classroom. She mentions that she'll allow him to get it this time since it's the first week of school, but he needs to remember next time." I found this interaction to be quite enlightening. The teacher approached "Mohamed" at his desk and communicated with him as if he could follow instructions. I was convinced that if any other student had a similar issue, the teacher would respond similarly. She doesn't treat "Mohamed" differently due to his disability. Her expectations for him are high, which is crucial for achieving her goals. The teacher instructs the homework checker to walk around the classroom, signing off on students' assignments. Once your assignment packet is signed, please come and sit on the carpet," the teacher adds. "Can someone repeat the directions I just gave?" she asks. A student is called upon and repeats the instructions to the class. This helps students who might have missed the instructions the first time to hear them again. The teacher goes to "Mohamed's" desk and verifies that he has his assignment folder out. She notices that his folder has been taken from his desk and his homework is completed." Students: "The teacher gives him a ticket. She employs a reward system in her classroom.

Students can earn tickets by staying on task, behaving well, assisting others, and generally being good classroom citizens. Conversely, teachers can deduct tickets if students don't meet these criteria. Eventually, the students can use these tickets to obtain items from the teacher's prize box." When I spoke with the teacher, she mentioned using this rewarding strategy for a while, and it has consistently worked well in her classroom. The students seem to appreciate the incentive system and

continuously explore new ways to earn more tickets. After the homework checker had reviewed their folders, most students quietly moved to the carpet and took their seats. I also sat on the carpet, and we all waited for further instructions. "Mohamed" sat across from me on the carpet. Today, several students were tasked with presenting their "Me Bags." These bags contained four to five personal items. The presenting student had the opportunity to sit in the teacher's chair at the front of the classroom. They shared information about their belongings, followed by other students asking questions. If a student made a statement instead of asking a question, the teacher gently reminded them that this was a time for questions. The teacher effectively kept the students engaged, and the introductions proceeded smoothly. She rarely went to "Mohamed" during the presentations. While she was supposed to sit cross-legged, he chose to position his legs in front of him, overlapping into someone else's space. Another student requested that "Mohamed" move her legs, but he declined. I tried to encourage "Mohamed" to sit cross-legged, but he ignored me since he didn't recognize me. In terms of including students with special needs, I perceived the teacher as confident. She checked on "Mohamed" a few times, unobtrusively. She communicated with him at his level, ensuring his engagement without being overbearing. "Mohamed" received the same treatment from the teacher as the other students. This teaching approach is essential in inclusive classrooms. While some children might need extra assistance, the teacher shouldn't overly focus on one student when there are thirty others in the class. The teacher managed to distribute her time and attention evenly among all the children.

Table N°2. Observation Schedule

Field Work Monitoring			
Observation	Time	Grade	Topic
Two	9.30AM-11.30AM	Fourth	Observation of a subject class

The researcher observed how the teacher effectively supported many students with learning challenges in achieving optimal results. Although the lesson was brief, the teacher employed various techniques that enhanced the students' performance. The teacher, Ms. X, utilized a microphone to ensure her clear and audible communication. She repeated key points and used visual aids throughout the class. Her classroom was equipped with a speaker system, and she wore a microphone to ensure her voice reached every corner of the room, benefiting students, especially those with hearing impairments. Notably, the teacher strategically varied her tone of voice, from loud to soft, making the class engaging. This modulation would have been difficult to perceive without the microphone. By placing students with hearing impairments near the speaker, they could easily follow the lesson's auditory nuances. The teacher's tendency to repeat statements was also observed. For instance, she would say, "Let's take a look through our books," after instructing students to open their books. This repetition aimed to engage all students and encourage participation. This approach holds promise, especially for English as a second language learners, and those needing additional clarification. The teacher's skillful use of repetition was consistent across lessons, serving as an effective strategy to ensure comprehension. This technique was found valuable in various classrooms, regardless of students' hearing abilities.

Another effective approach employed by Ms. X was the use of visuals, notably projecting the book onto a Smart Board during lessons. By tracing the words with her finger as she read, students who faced hearing or comprehension challenges could visually follow along. In mathematics lessons, the teacher similarly used visual aids, drawing problems on the board to guide students through the problem-solving process. The inclusion of pictures greatly benefited all students. The teacher's confidence in educating students with special needs was evident. Despite minimal hearing impairment, she adapted her teaching methods to ensure these students' success. Wearing a microphone during group lessons, frequent repetition, and the incorporation of visuals were all key strategies she employed. Her expertise in preparing students with hearing impairments for success was undeniable.

Table N°3. Observation Schedule

Field Work Monitoring			
Observation	Time	Grade	Topic
Two	13.30AM-13.30AM	Second	Lesson on Clock making

The researchers focused their attention on observing how Ms. Y. provided support to a student diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), who was named "Nidal". The particular context was during an afternoon session of clock-making instruction. The teacher exhibited confidence when it came to keeping "Nidal" on track, even though he faced challenges in maintaining focus. Despite his occasional lapses, the teacher made dedicated efforts to help "Nidal" succeed. Throughout the

lesson, she interacted with "Nidal" multiple times. "Nidal's" seating arrangement was distinct, as he sat at an individual desk separate from the group tables. The teacher explained that this arrangement was chosen to enhance his focus on tasks. While "Nidal" had initially attempted to sit with the other students, it turned out to be disruptive for the class. Over the school year, the teacher continuously collaborated with "Nidal" to maximize his success. The lesson commenced with the teacher showcasing two types of clocks – traditional and digital – to the students. "Nidal", notably skilled at reading analog clocks, was asked by the teacher to demonstrate this skill to the class. He was allowed to stand up and showcase his ability, with the teacher providing gentle guidance to ensure a positive experience. "Nidal's" active engagement continued when the teacher introduced a hands-on activity of crafting analog clocks. "Nidal's" eagerness led him to exhibit some restless behavior, but he quickly complied with the teacher's reminder to focus. As the designated paper passer for the day, "Nidal" momentarily struggled with sharing the task, but the teacher intervened to ensure equitable distribution. During the clock-making process, "Nidal" encountered a challenge in gluing the clock face onto a paper plate. The teacher offered personalized guidance, which significantly aided his understanding. Furthermore, "Nidal" partnered with a fellow student for the activity, and the teacher's presence as his partner contributed to his sustained focus. The teacher's skillful management was evident in her ability to maintain "Nidal's" engagement while accommodating his needs. "Nidal's" occasional need to move around was addressed with an alternative fidget desk, allowing him to remain attentive to the task at hand.

In summary, the teacher's approach was instrumental in fostering success and productivity for students like "Nidal". Despite his separate seating arrangement and

occasional difficulties, the teacher's strategies ensured "Nidal's" active participation and learning. The teacher's verbal prompts and the provision of a suitable desk exemplified her effective system for keeping "Nidal" focused and involved in the classroom.

Table N°4. Observation Schedule

Field Work Monitoring			
Observation	Time	Grade	Topic
Two	13.30AM-13.30AM	Second	Physical Education is an important part of a child

The researcher conducted fieldwork in a second-grade inclusion classroom, where five students were identified as having Attention Deficit Hyperactivity Disorder (ADHD). Among these students, two had intellectual disabilities, two had hearing impairments, and one had a partial loss of a hand. This particular second-grade inclusion classroom served as the setting for the researcher's fieldwork. Within this group, five students were diagnosed with ADHD, consisting of two with intellectual disabilities, two with hearing impairments, and one with partial hand loss. The student who drew the researcher's attention today was "Nizar", identified by the researcher. "Nizar", notably smaller in size compared to his peers, possesses only one arm and does not use a prosthetic limb. He effectively manages daily tasks with his right arm. Ms. Y., the teacher identified by the researcher, puts in dedicated efforts to modify Physical Education activities to support Nizar's success. During the observation, the

researcher witnessed a Physical Education class. The teacher had set up an obstacle course for the children to complete, consisting of four distinct activities. The first task was jumping rope, with the instruction for the children to jump eight times. To accommodate 'Nizar', the teacher ensured that an alternative activity was included. The teacher said: "If you're unable to jump rope, do eight jumping jacks," she advised, then requested a student to demonstrate." "Nizar" volunteered to help with the demonstration.

The teacher performed the jumping jacks alongside him, showing both arms moving in a non-dominant way. The balance beam was the second segment of the course, where the children were directed to walk in a straight line. For added assistance, the teacher informed the children that a friend could hold their hand while crossing the beam. This modification applied to all students. Given Nizar's limited arm, the teacher aimed to ensure his ability to participate effectively. The third part involved Scooters. Children had to traverse the school field and return. This activity remained unaltered. The teacher later, approached Nizar and allowed him to run across the field if he preferred. Nizar's joy was evident, as he grinned broadly. This unique privilege made him feel special compared to others using scooters. The teacher mentioned he crab-walked back to the starting point. The teacher demonstrated the crab walk, suggesting students try a few steps. If too challenging, they could return to jumping ropes. She asked if anyone had questions, but no queries were raised. The teacher adeptly identified the adjustments needed to facilitate Nizar's success in the Physical Education class. The study indicates that Nizar remained as active as his peers without noticeable difficulties. The teacher provided timely support and encouragement when necessary. Her proficiency in employing effective inclusion strategies was evident.

Observations across classrooms revealed a consistent theme: teachers implemented various tactics to ensure student achievement. Both Ms. X. and Ms. Y., the teachers observed, utilized the following strategies: personalized one-on-one assistance, tailored strategies for individual students, and fostered active participation and collaboration. This personalized approach allowed teachers to create unique plans for student success. Ms. X. went a step further by arranging desks into small groups to encourage collaborative interaction, a crucial aspect for students with special needs. Both teachers encouraged full engagement from all students, ensuring participation in classroom activities and discussions. Expecting involvement from students with special needs fosters a sense of belonging. Lastly, the teachers utilized small group discussions to promote inclusive learning environments, allowing all students, including those with specific needs, to engage fully without feeling judged by their peers.

5. The Pedagogical Implications and Conclusion

5.1. The Pedagogical Implications

The objective of the study was to explore effective teaching strategies for enhancing the enrollment of impaired students in classrooms, assess the impact of these strategies on their academic and socio-emotional development, and examine how collaboration between educators, parents, and specialists can optimize the learning environment for disabled learners. The research and existing literature highlighted several key instructional approaches, including: preparing and starting lessons effectively, creating customized plans for each child, offering alternative guidelines, fostering an inclusive classroom environment, and collaborating with teaching assistants.

5.1.1. Start and Prepare

The first step in accommodating students with disabilities in the classroom involves ensuring proper arrangements, which is similar to acquiring a new skillset for teachers. A key finding from the literature review highlighted the importance of a consistent daily classroom structure, which helps students with special needs feel more secure and engaged. Classroom observations revealed that teachers often displayed the daily schedule on the board, providing students with a clear framework for the day's activities, ensuring they were prepared and able to stay engaged in the learning process.

5.1.2. Customized Plans for every Child

Customized plans are particularly beneficial for students with developmental challenges or complex learning needs. The literature review and findings emphasized the importance of personalized interactions between teachers and students, allowing for tailored strategies that promote student success. However, frequent individual interactions may place a heavy responsibility on teachers. While this may not be problematic for teachers, it's important to ensure that specialists and consultants offer practical support during planning sessions, rather than assuming the teacher will handle complex interventions alone.

5.1.3. An Alternate Array of Guidelines

When designing a curriculum unit, certain educators discover it beneficial to inquire: Are modifications necessary? Could technology enhance learning for certain or all students? Do specific students necessitate alternative content delivery? Should

certain students showcase their work uniquely? Will uniform assessment apply to all students? Might certain individuals require supplementary or distinct learning goals?

5.1.4. Establishing a Classroom that Fosters Inclusion

Creating positive behavior standards and a supportive atmosphere is crucial in an inclusive classroom. It's essential for the teaching team to maintain consistent disciplinary procedures to avoid confusion and frustration among students. Implementing self-management tools, like class meetings where students make collaborative decisions, can be effective. The Literature Review suggests that teachers should review students' Individualized Education Plans (IEPs) before the school year starts to understand their specific needs, particularly when students work with multiple instructors. Weekly collaborative meetings among teachers are vital for addressing these needs. Additionally, developing a classroom crisis plan with students helps ensure effective responses to emergencies. Lastly, showing genuine enthusiasm for teaching and learning fosters a positive response from students.

5.1.5. Working Together with Teaching Assistants

The study highlights the widespread support for teaching assistants in classrooms, with parents, educators, and students recognizing their importance in integrating children with disabilities. Many teachers consider teaching assistants one of the most valuable resources. In some cases, teaching assistants take on significant responsibilities in students' educational programs, which can lead to students becoming overly dependent on them and reducing peer interactions. However, teaching assistants often lack formal training, and their roles should be structured under teacher supervision, particularly in tasks like monitoring progress or managing

small group activities. To improve collaboration, teachers and teaching assistants should engage in joint professional development, and teachers should be involved in the selection of their assistants. Research also showed that teachers, despite their success in mainstreaming students with disabilities, approached their teaching with a sense of experimentation, continually adjusting their methods based on observations and outcomes (Shaddock, Giorcelli, and Smith, 2007).

5.2. Conclusion

In conclusion, both the literature review and findings indicate that certain instructional practices are crucial for the academic success of students with disabilities. These practices include personalized one-on-one support, fostering active participation and collaboration, maintaining consistent classroom routines, and engaging with colleagues to explore innovative teaching methods. The research emphasizes the importance of these strategies in creating successful inclusive classrooms, with educators' eager to implement them when possible. To effectively address teaching challenges, it's essential to provide consistent guidance, offer active examples, and be mindful of passive actions. Developing a comprehensive approach to include disabled children in educational programs is key, as everyone shares responsibility for their academic progress. Educators should collaborate to apply their expertise in classrooms with diverse student populations. Additionally, incorporating special education curriculum and experience in inclusive settings into pre-service teacher training can improve educators' attitudes and preparedness, enhancing their ability to support students with disabilities through tailored strategies and accommodations.

- References:

- 1) Bauer, R. H. (1987). Control processes as a way of understanding, diagnosing, and remediating learning disabilities. In H. L. Swanson (Ed.), *Advances in learning and behavioral disabilities: Memory and learning disabilities* (pp. 41–81). Greenwich, CT: JAI Press.
- 2) Borkowski, J. G., Weyhing, R. S., & Carr, M. (1988). Effects of attributional retraining on strategy-based reading comprehension in learning-disabled students. *Journal of Educational Psychology*, 80, 46–63.
- 3) Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3, 77-101. <https://doi.org/10.1177/1478088706qp063oa>.
- 4) Brown, R. T., & Wynne, M. E. (1984). An analysis of attentional components in hyperactive and normal boys. *Journal of Learning Disabilities*, 17, 162–167.
- 5) Bryan, T., & Wheeler, R. (1972). Perception of learning-disabled children: The eye of the observer. *Journal of Learning Disabilities*, 5, 484–488.
- 6) Ceci, S., Ringstorm, M., & Lea, S. (1981). Do language learning disabled children have impaired memories? In search of underlying processes. *Journal of Learning Disabilities*, 14, 159–163.
- 7) Chapman, J. (1988). Cognitive-motivational characteristics and academic achievement of learning-disabled children. *Journal of Educational Psychology*, 80, 357–365.
- 8) Dörnyei, Z. (2007). *Research Methods in Applied Linguistics*. Oxford University Press.
- 9) Dweck, C. S. (1975). The role of expectations and attributions in the alleviation of learned helplessness. *Journal of Personality and Social Psychology*, 31, 674–685.
- 10) Explorable.com. (2009, September 16). Convenience Sampling. <https://explorable.com/convenience-sampling>.
- 11) Gettinger, M. (1991). Learning time and retention differences between nondisabled students and students with learning disabilities. *Learning Disability Quarterly*, 179–189.
- 12) Goldstein, K. (1936). The modifications of behavior consequent to cerebral lesions. *Psychiatric Quarterly*, 10, 586–610.
- 13) Graham, S., & Harris, K. R. (1996). Self-regulation and strategy instruction for students who find writing and learning challenging. *The science of writing: Theories, methods, individual differences, and applications*, 347-360.
- 14) Hallahan, D. P., Kauffman, J. M., & Lloyd, J. W. (1996). *Introduction to learning disabilities*. Boston: Allyn & Bacon.
- 15) Hammill, D., & Larsen S. (1974). The effectiveness of psycholinguistic training. *Exceptional Children*, 41, 5–14.
- 16) Harris, K. R., Graham, S., & Pressley, M. (1992). Cognitive behavioral approaches in reading and written language: Developing self-regulated learners. In N. N. Singh & I. L. Beale (Eds.), *Current perspectives in learning disabilities: Nature, theory, and treatment* (pp. 415–451). New York: Springer-Verlag.
- 17) Kavale, K. A., & Forness, S. R. (1996). Social skills deficits and learning disabilities: A metaanalysis. *Journal of Learning Disabilities*, 29, 226–237.
- 18) Kistner, J., Osborn, M., & LeVerrier, L. (1988). Causal attributions of learning-disabled children: Developmental patterns and relation to academic progress. *Journal of Educational Psychology*, 80, 82–89.
- 19) Lerner, J. (2000). *Learning disabilities*. Boston: Houghton Mifflin.

- 20) Lindsley, O. R. (1964). Direct measurement and prosthesis of retarded behavior. *Journal of Education*, 147, 62–81.
- 21) McKinney, J. D., & Feagans, L. (1983). Adaptive classroom behavior of learning disabled students. *Journal of Learning Disabilities*, 16, 360–367.
- 22) **Mercer, C.** (1997). *Students with learning disabilities* (5th ed.). Upper Saddle River, NJ: Prentice-Hall.
- 23) **Miles, B., & Huberman, A. M.** (2009). *Qualitative Data Analysis*. Sage Publications Ltd.
- 24) **Murray, C., Goldstein, D. E., & Edgar, E.** (1997). The employment and engagement status of high school graduates with learning disabilities through the first decade after graduation. *Learning Disabilities Research and Practice*, 12, 151–160
- 25) **Owings, R. A., Petersen, G. A., Bransford, J. D., Morris, C. D., & Stein, B. S.** (1980). Spontaneous monitoring and regulation of learning: A comparison of successful and less successful fifth graders. *Journal of Educational Psychology*, 72, 250–256.
- 26) **Stanovich, K.** (1986). Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy. *Reading Research Quarterly*, 21, 360–406.
- 27) **Stipek, D.** (1993). *Motivation to learn: From theory to practice*. Boston: Allyn & Bacon.
- 28) **Strauss, A. A., & Lehtinen, L. E.** (1947). *Psychopathology and education of the brain-injured child*. New York: Grune & Stratton.
- 29) **Swanson, H. L.** (1993). Principles and procedures in strategy use. In L. Meltzer (Ed.), *Strategy assessment and instruction for students with learning disabilities* (pp. 61–92). Austin, TX: PROED.
- 30) **Swanson, H. L., Cochran, K. F., & Ewers, C. A.** (1990). Can learning disabilities be determined from working memory performance? *Journal of Learning Disabilities*, 23, 59–67.
- 31) **Weiner, B.** (1979). A theory of motivation for some classroom experiences. *Journal of Educational Psychology*, 71, 3–25.
- 32) **Wong, B. Y. L., & Wilson, M.** (1984). Investigating awareness of and teaching passage organization in learning disabled children. *Journal of Learning Disabilities*, 17, 477–482.