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The Reality of Including Students with Special Educational Needs in Mainstream Schools

(An Analytical Review of Previous Studies)

واقع دمج ذوي الاحتياجات الخاصة في مدارس العاديين (قراءة تحليلية في الدراسات السابقة)

Zineb Ben Zineb*

University of Blida 2

benzinebzineb796@gmail.com

Habiba Difallah

University of Blida 2

habiba_difallah@yahoo.com

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الملخص

تهدف هذه الدراسة إلى تحليل واقع دمج فئة ذوي الاحتياجات الخاصة في المدارس العادية، من خلال مراجعة منهجية للأدبيات التربوية الحديثة المنشورة خلال الفترة الممتدة ما بين 2020 و2025، وذلك في ضوء المبادئ التي أكد عليها بيان سلامنكا الصادر سنة 1994 عن المؤتمر العالمي حول التربية الخاصة المنعقد في إسبانيا برعاية اليونسكو. ارتكزت هذه المراجعة على ثلاث محاور رئيسية: جاهزية المعلمين لتطبيق الدمج، الممارسات البيداغوجية المعتمدة في الأقسام العادية، وأهم المعيقات التي تحول دون تحقيق الدمج الفعّال. اعتمدنا على عينة مكونة من أربعة عشرة دراسة تم اختيارها وفق معايير الصلة بالموضوع، حداثة النشر، والشمولية. أظهرت النتائج أن نجاح الدمج لا يتوقف عند مستوى السياسات المعلنة، بل يستلزم تفعيلها ميدانيًا من خلال تطوير برامج التكوين المستمر للمعلمين، وتبني استراتيجيات بيداغوجية مرنة مدعومة بالوسائل التكنولوجية المساعدة. كما أن تحقيق الأهداف التي نص عليها بيان سلامنكا يقتضي تجاوز التحديات المرتبطة بضعف الإمكانيات، وقلة الموارد، ومحدودية الدعم المؤسسي. وتوصي الدراسة بضرورة وضع سياسات واقعية، وتعزيز التكوين المتخصص، وتوفير الموارد التربوية والتكنولوجية الكفيلة بتهيئة بيئة تعليمية دامجة لجميع الفئات.

الكلمات المفتاحية :الدمج المدرسي، ذوي الاحتياجات الخاصة، التعليم الدامج، بيان سلامنكا، جاهزية المعلمين.

Abstract:

* Corresponding author

This study aims to provide an analytical review of the current reality of integrating students with special educational needs into mainstream schools, through a systematic examination of recent educational literature published between 2020 and 2025. The review draws upon the principles established in the 1994 Salamanca Statement, adopted at the World Conference on Special Needs Education in Spain under the auspices of UNESCO. It focuses on three main dimensions: teachers' readiness to implement inclusion, the pedagogical practices applied in regular classrooms, and the barriers that hinder the achievement of effective integration. A purposive sample of fourteen studies was selected based on relevance, recency, and comprehensiveness. The findings reveal that successful inclusion goes beyond declared policies and depends on their practical implementation through continuous teacher training, the adoption of flexible pedagogical strategies, and the use of assistive technologies. Moreover, achieving the objectives outlined in the Salamanca Statement requires addressing the persistent challenges of limited resources, insufficient institutional support, and inadequate facilities. The study concludes by recommending the development of realistic policies, the strengthening of specialized teacher training, and the provision of adequate educational and technological resources to ensure an inclusive learning environment for all students.

Key words: inclusive education; special educational needs; Salamanca Statement; teachers' readiness; pedagogical practices.

Introduction:

In recent decades, educational systems worldwide have undergone a profound paradigm shift in addressing the learning needs of students with disabilities. The dominant global movement has transitioned from segregation toward inclusive education, which ensures equitable learning opportunities for all learners regardless of their physical, sensory, or cognitive differences. The 1994 Salamanca Statement represented a milestone in this transformation by affirming the right of all children, including those with special educational needs, to access mainstream schools that provide appropriate accommodations and adaptive learning environments.

In Algeria, these international orientations have been reflected in successive educational reforms designed to adapt curricula, enhance teacher preparation, and provide supportive resources. Nevertheless, a persistent disparity remains between policy commitments and classroom realities. Existing research continues to highlight the practical difficulties teachers face in applying inclusive pedagogical approaches, often due to limited professional training, inadequate resources, and insufficient institutional support.

Building upon this context, the present study aims to systematically analyze the educational literature published between 2020 and 2025 concerning the integration of students with special educational needs in mainstream schools, in light of the guiding principles of the Salamanca Statement. Specifically, the study examines teachers' preparedness for inclusion, pedagogical practices adopted in inclusive settings, and the ongoing barriers impeding the realization of inclusive education. It further provides evidence-based recommendations to strengthen the implementation of inclusive educational practices.

First: Theoretical Framework

1 Research Problem:

Modern educational policies have increasingly moved beyond the stage of exclusion and segregation of individuals with special educational needs. For decades, such groups—those with cognitive, sensory, or motor impairments—were often viewed through a deficit-oriented lens and placed in specialized institutions that provided segregated services according to the type and degree of disability. However, contemporary social philosophies and modern educational paradigms now recognize the individual as the central focus of the educational process. From this perspective, education should never occur in isolation from the society to which the learner belongs, as genuine psychological and social development can only be achieved through interaction and participation that enable the individual to integrate as an independent and active member of society.

In line with the principles of educational equity and equal opportunity, a modern trend in special needs education has emerged that promotes equality among all members of society regardless of disability level. This approach aims to empower learners with special educational needs educationally, pedagogically, and socially by integrating them into mainstream schools.

The issue of academic inclusion for students with disabilities has attracted wide international attention in recent decades, both from human rights organizations and global educational policy frameworks, providing fertile ground for educators and researchers to explore inclusion as a key theme in educational scholarship.

A landmark in this regard was the Salamanca Statement (1994) (UNESCO, 1994), which marked a turning point in global educational thought. It established the principles of inclusive education as the most appropriate framework for ensuring equality and equity for all children, including those with disabilities. The Statement emphasized that well-prepared mainstream schools represent the most effective means of achieving both educational and social inclusion.

Despite considerable international and national efforts aimed at adopting inclusive education policies, the implementation of these principles continues to face complex challenges at multiple levels. Previous studies have revealed a significant gap between official policy frameworks and actual classroom practices. For example, Yahiaoui (2023) (Abdelkrim, 2023) concluded that teacher training programs remain limited and insufficient to prepare educators for the effective application of inclusive strategies. Similarly, Kamari et al. (2023) (Kameri et al., 2023) found that the lack of technological resources represents one of the most serious obstacles to the inclusion of learners with hearing impairments in mainstream classrooms.

At the international level, studies by Açar and Demiralp (2025) (Açar & Demiralp, 2025) and Villarente and Donayre (2025) (Villarente & Sheila, 2025) highlighted the importance of adapting classroom practices and utilizing assistive educational technologies to

enhance interaction among students with hearing impairments. These studies also pointed out challenges related to insufficient teacher preparation and limited resources, underscoring that the gap between global reference frameworks and field implementation remains a persistent issue.

Accordingly, this study seeks to address the following overarching research question:

What is the current reality of integrating students with special educational needs into mainstream schools, as reflected in contemporary educational literature (2020–2025)?

From this main question, the Following sub-questions arise :

- How have previous studies addressed teachers' readiness for inclusive education?
- What pedagogical strategies and educational technologies have been identified as effective in supporting inclusion within mainstream classrooms?
- What key barriers and challenges continue to impede the realization of inclusive education for students with special educational needs?

2 Research Hypotheses:

Based on the analytical review of previous studies and relevant theoretical frameworks, the following hypotheses are proposed:

H1: Teachers' theoretical understanding of inclusive education remains insufficient, which negatively influences their preparedness and ability to effectively implement inclusion in mainstream classrooms.

H2: The adoption of diverse pedagogical strategies and the integration of assistive technologies are essential determinants of successful inclusion for students with special educational needs.

3 Research Objectives:

The current study aims to:

- Analyze and synthesize recent theoretical and empirical literature (2020–2025) addressing the integration of students with special educational needs into mainstream schools.
- Examine how previous research has conceptualized and assessed teachers' readiness in terms of theoretical understanding, pedagogical competence, and professional training.
- Identify and describe the instructional strategies and pedagogical practices proposed in prior studies as effective means to facilitate inclusion.
- Categorize and interpret the structural, organizational, and pedagogical barriers reported in previous literature that hinder the effective implementation of inclusive education.

4. Significance of the Study:

- **Theoretical Significance:**

This study advances the theoretical understanding of inclusive education by synthesizing and critically analyzing research published between 2020 and 2025 on the integration of students with special educational needs into mainstream schooling. It enriches scholarly discourse by elucidating the conceptual underpinnings of inclusion, identifying theoretical gaps in prior studies, and underscoring the influence of global frameworks—such as the Salamanca Statement—on the formulation of inclusive education policies.

Furthermore, the study offers a renewed theoretical lens that situates inclusive education within the broader paradigms of equity, social justice, and human rights in education, thereby contributing to the ongoing theoretical dialogue in the field of special and inclusive education. Drawing on insights from contemporary educational research, it also lays a conceptual groundwork for developing contextually grounded models of inclusion, particularly within Arab educational systems and the Algerian context. Finally, it highlights the critical factors determining the success or failure of inclusive practices, enriching the wider academic conversation on educational equity and reform.

- **Applied Significance:**

From a practical point of view, this study offers useful and evidence-based insights for educational stakeholders, including teachers, school administrators, policymakers, and curriculum designers. By identifying effective teaching strategies, evaluating teachers' readiness, and analyzing the challenges that limât inclusion, the study provides practical recommendations to improve classroom practices and strengthen institutional support.

Its results can also guide the development of teacher training programs, the adaptation of curricula, and the creation of learning environments that met the needs of all learners, whether with or without disabilities. Therefore, the study serves as both a theoretical reference and a practical guide for improving inclusive education in Algeria and similar educational contexts.

5. Key Concepts of the Study:

The present study is grounded on a set of central concepts that define its theoretical orientation and analytical scope. These concepts are clarified below to ensure terminological precision and coherence in interpretation.

5.1. Inclusion (Integration) of Students with Special Educational Needs:

- **Linguistic Definition:**

The term inclusion originates from the Latin root includere, meaning "to make part of" or "to bring into." Linguistically, it refers to the act of incorporating an individual or group into a broader whole(Harper, 2024).

- **Conceptual (Terminological) Definition:**

In the field of education, inclusion denotes the process of integrating students with disabilities or special educational needs into mainstream schools in ways that ensure equal access, participation, and learning opportunities. According to the Salamanca Statement (UNESCO, 1994), inclusive education involves restructuring school culture, policies, and practices to accommodate the diversity of learners(UNESCO, 1994).

- **Operational Definition (as used in this study):**

In this research, inclusion refers to the integration of students with special educational needs into regular schools through adaptive teaching strategies, individualized instruction, and supportive social environments that promote equity, belonging, and holistic development.

5.2. Students with Special Educational Needs (SEN) :

- **Linguistic Definition:**

The term special originates from the Latin word specialis, meaning "particular" or "distinct," while needs refers to "requirements" or "necessities." Linguistically, the expression denotes individuals who require specific forms of care or support to meet their unique circumstances. (Harper, 2024)

- **Conceptual (Terminological) Definition:**

According to the Individuals with Disabilities Education Act (IDEA, 2004), students with special educational needs are those who "require special education and related services because of physical, mental, emotional, or learning disabilities." This definition highlights the right of every learner to access education adapted to their particular developmental and functional needs. (U.S. Department of Education, 2004)

- **Operational Definition (as used in this study):**

In the context of this study, students with special educational needs refers to learners who experience sensory, cognitive, physical, or emotional impairments that affect their academic performance and social participation. These students require individualized instructional approaches, specialized educational support, and adaptive learning environments to ensure their successful integration into mainstream schools.

5.3. Teachers' Readiness:

- **Linguistic Definition:**

The word readiness derives from the adjective ready, meaning "prepared, equipped, or willing to act." Linguistically, it denotes the state of being mentally and practically prepared to perform a specific task. (Harper, 2024)

- **Conceptual (Terminological) Definition:**

In the educational context, teachers' readiness refers to "the degree to which teachers possess the knowledge, skills, and attitudes required to implement inclusive education effectively" (Avramidis & Norwich, 2002). It encompasses teachers' theoretical understanding of inclusion, their pedagogical competence, and their willingness to accommodate learners with diverse needs within mainstream classrooms. (Avramidis & Norwich, 2002)

- **Operational Definition (as used in this study):**

In this study, teachers' readiness refers to the extent to which teachers are theoretically, pedagogically, and professionally prepared to adopt inclusive educational practices. It includes their ability to adapt lesson plans, apply flexible teaching methods, and use assistive technologies that respond to the individual needs of students with disabilities in mainstream educational settings.

5.4. Pedagogical Practices:

- **Linguistic Definition:**

The word pedagogy comes from the Greek root paidagōgia, which literally means "to lead the child." Linguistically, it refers to the art or science of teaching and guiding learners toward knowledge and skills acquisition. (Harper, 2024)

- **Conceptual (Terminological) Definition:**

According to Villarente and Sheila (2025, pp. 1474–1485), pedagogical practices refer to the "strategies and instructional methods employed by teachers to achieve learning objectives based on the learners' individual needs." These practices include the use of technological tools, visual aids, and flexible communicative approaches that facilitate accessibility, engagement, and differentiated instruction within inclusive classrooms. (Villarente & Sheila, 2025)

- **Operational Definition (as used in this study):**

In the present research, pedagogical practices denote the inclusive teaching strategies adopted by mainstream teachers to accommodate students with special educational needs. These practices encompass the application of assistive technologies, visual and auditory media, differentiated teaching methods, and flexible communication styles that promote equal learning opportunities and active participation among all learners.

5.5. Barriers to Inclusion:

- **Linguistic Definition:**

The term barrier derives from the Old French barriere, meaning "an obstacle or hindrance." Linguistically, it signifies anything that prevents progress, access, or interaction within a given system. (Harper, 2024)

- **Conceptual (Terminological) Definition:**

Barriers to inclusion are defined as all the factors that limit the success of inclusive education policies, encompassing academic, organizational, material, and social dimensions. These factors collectively impede the effective implementation of inclusive practices and restrict equal learning opportunities for students with special educational needs in mainstream schools. (Kiiza & Mwesigwa, 2025)

- **Operational Definition (as used in this study):**

In this research, barriers to inclusion refer to the combination of pedagogical, organizational, material, and social challenges that obstruct the effective implementation of inclusive education in Algerian mainstream schools. These include the lack of teacher training, limited resources, inadequate infrastructure, and persistent societal misconceptions about disability, which collectively impede the realization of inclusive educational policies and practices.

6. Research Methodology

This study adopts a descriptive analytical method designed to provide an in-depth understanding of the current reality of inclusive education for students with special educational needs in mainstream schools. The approach is based on a systematic review and qualitative content analysis of previous studies that addressed the topic of inclusion between 2020 and 2025.

The analytical process relied on the examination of fourteen empirical and theoretical studies selected from reputable academic journals and institutional reports. The selection criteria were determined according to:

- Relevance — the study must focus explicitly on inclusive education or the integration of learners with special educational needs.
- Recency — the publication must fall within the five-year range (2020–2025) to ensure the validity and timeliness of the data.
- Scientific reliability — studies published in peer-reviewed journals or official educational reports were prioritized.
- Thematic comprehensiveness — the selected works needed to address at least one of the three main dimensions: teachers' readiness, pedagogical practices, or barriers to inclusion.

The data were analyzed using qualitative content analysis, which involved identifying, categorizing, and synthesizing the recurring themes and patterns emerging across the reviewed studies. This analytical procedure allowed for the extraction of meaningful insights regarding the status of inclusive education practices and challenges within different educational contexts.

7. Sources of Previous Studies:

After defining the topic of the study and establishing the selection criteria for previous research, the process of identifying relevant studies was initiated. The researcher relied on a combination of academic search engines and international and national scientific databases to ensure the comprehensiveness and credibility of the reviewed literature. The most important sources included:

- **Google Scholar:** considered one of the most prominent academic search engines, providing access to a wide range of peer-reviewed articles and scientific publications.
- **The Algerian Scientific Journals Platform (ASJP**): a modern electronic platform dedicated to the management and dissemination of Algerian scientific journals. It contains a significant number of peer-reviewed articles published in national academic journals.
- **ScienceDirect**: one of the largest international repositories for peer-reviewed academic articles in the fields of educational and social sciences.
- **ResearchGate**: a global research-sharing platform that provides access to a vast collection of recent academic studies and scholarly works from researchers around the world.

This diverse set of databases ensured a rich and balanced corpus of studies, combining both international perspectives and local Algerian research contributions, which strengthened the analytical depth and contextual relevance of the study.

8. Data Analysis Technique:

The data were analyzed using the qualitative content analysis method, which involved identifying, classifying, and synthesizing key ideas and patterns across the selected studies. The analysis was carried out in four main stages:

- **Data preparation:** careful reading and re-reading of the selected studies to ensure a full understanding of their content.
- **Coding:** identifying keywords, recurring phrases, and conceptual units related to teachers' readiness, pedagogical practices, and barriers to inclusion.
- **Categorization**: grouping similar codes into broader analytical categories and themes.

- **Interpretation:** synthesizing the themes to highlight convergences and divergences across the reviewed studies and to derive comprehensive insights into inclusive education practices and challenges.

This analytical approach provided a structured and evidence-based framework for understanding the theoretical foundations, practical experiences, and systemic challenges associated with implementing inclusive education.

Second : Findings and Discussion

1. Discussion of the First Research Question: Teachers' Readiness:

To answer the first research question — How have previous studies addressed teachers' readiness in terms of their theoretical knowledge regarding the inclusion of students with special educational needs? — the researcher analyzed and discussed a set of studies that focused on teachers' preparedness, their theoretical understanding of inclusive education, and the professional skills required for its effective implementation in mainstream schools.

The review covered five studies, both national and international, conducted between 2021 and 2025, arranged chronologically and analyzed in light of their objectives, methodology, sample, instruments, and main findings, as follows:

- **Sayed and Tabaa (2021)** (Sayed & Tabbah, 2021)

aimed to highlight the importance of preparing and training mainstream school teachers as a key condition for the success of inclusive education policies in Algeria. Through a conceptual analysis of the requirements and patterns of teacher preparation, the study revealed that the success of inclusion largely depends on teachers' accurate knowledge of the characteristics of learners with special needs and their mastery of specialized pedagogical skills. The study also noted that the lack of initial and in-service training remains one of the main obstacles preventing the effectiveness of inclusion, despite the availability of educational resources.

- **Yahiaoui and Beshata (2021)** (Yahiaoui & Beshata, 2021)

sought to identify the training needs of teachers of hearing-impaired children in Algeria and their relationship with certain demographic and professional variables. Using a descriptive approach and a 50-item questionnaire applied to a sample of 250 specialized teachers, the study found that all proposed training needs were essential for effective teaching performance — particularly in relation to teaching methods, communication strategies, and classroom adaptation. No significant differences were found according to demographic variables, indicating a general and pressing need for professional development across all teacher groups.

- **Al-Shammari (2024)** (Al-Shammari, 2024)

examined the extent to which special education teachers understood and applied curriculum adaptations and modifications in inclusive primary schools in Kuwait. Using a two-dimensional questionnaire measuring understanding and application, administered to 255 teachers, the study found that the level of theoretical understanding was low, whereas the level of practical application was high. Significant differences were found in favor of teachers with higher academic qualifications. The study recommended balancing theoretical and practical aspects and intensifying training programs on school inclusion.

- **Undaloc et al. (2024)** (Undaloc et al., 2024)

investigated teachers' knowledge of inclusive education principles and their classroom management skills in inclusive settings in the Philippines. Data were collected through a 24-item questionnaire administered to 39 teachers at Talamban National High School. Findings indicated a very high level of knowledge (mean = 4.40/5) and a high level of skills (mean = 4.03/5). A moderate, positive, and statistically significant correlation was found between knowledge and skills ($r = 0.517$, $p = 0.001$). The study recommended continuous professional development programs to strengthen both knowledge and teaching skills in inclusive education.

- **Afriani (2025)** (Afriani, 2025)

explored teachers' roles, strategies, and challenges in implementing inclusive education in Indonesian schools using a qualitative approach. Semi-structured interviews, classroom observations, and document analysis were employed as data collection methods. Findings showed that teachers generally held positive attitudes toward inclusive education; however, they relied heavily on personal experience and non-systematic teaching strategies, revealing a lack of specialized training and institutional support. The study recommended designing comprehensive training programs grounded in practical experience to enhance teachers' competence in inclusive teaching.

- **Synthesis and Discussion**

Analysis of these studies reveals a strong consensus that teachers' readiness is one of the fundamental prerequisites for successful inclusive education, aligning with the principles emphasized in the Salamanca Statement (UNESCO, 1994), which called for equipping teachers with the knowledge, skills, and positive attitudes necessary to ensure effective learning for all students.

The findings of Sayed and Taba'a (2021) and Yahiaoui and Beshata (2021) highlighted the persistent deficiency in initial and ongoing teacher training and the urgent need for comprehensive professional development programs. These results are consistent with

the findings of Al-Shammari (2024), Undaloc et al. (2024), and Afriani (2025), which demonstrated that teachers' acquisition of high levels of knowledge and pedagogical skills directly enhances the effectiveness of inclusive education in mainstream schools.

In contrast, the absence of systematic training leads teachers to rely on unsystematic, experience-based strategies and results in weaker classroom performance. The studies further indicated that the correlation between teachers' theoretical knowledge and their practical skills is strongest in environments that provide institutional support and continuous professional development opportunities, while the greatest challenges persist in contexts that lack such support systems.

Accordingly, strengthening teachers' professional preparation, as recommended by the Salamanca Statement, should be considered a strategic priority for achieving effective inclusive education and ensuring equal learning opportunities for all students. Teacher preparation must not be limited to pre-service training but should include continuous professional development, enabling teachers to acquire advanced competencies in adapting pedagogical practices, employing diversified teaching strategies, and implementing flexible assessment methods that ensure active participation of learners with special needs.

Investing in ongoing teacher development enhances educators' capacity to manage inclusive classrooms effectively and reduces reliance on traditional, unstructured practices that persist in the absence of institutional guidance and systematic training.

2. Discussion of the Second Research Question: Pedagogical Practices and Instructional Techniques:

To answer the second research question — What are the main pedagogical practices and instructional techniques proposed by previous studies to support the inclusion of students with special educational needs in mainstream schools? — several relevant studies were analyzed and discussed. These studies examined the teaching strategies and educational technologies that enhance the effectiveness of inclusive education. The studies are presented chronologically, highlighting their objectives, methods, samples, instruments, and key findings as follows:

- **Yahiaoui (2023)** (Abdelkrim, 2023)

Aimed to identify the training needs of inclusion teachers in Algeria, particularly in relation to pedagogical practices directed toward students with hearing impairments. The study sample consisted of inclusion teachers working in Algerian primary schools. Using a questionnaire as the data collection tool, the results revealed a clear gap between the requirements of inclusive education and the practices actually implemented. Teachers largely relied on traditional, non-adaptive teaching methods that failed to meet the specific needs of deaf students, and the use of visual media and sign language was notably absent.

- **Ayomsari and Azizah (2024)** (Ayomsari & Azizah, 2024)

Investigated the instructional strategies used with hearing-impaired students in Indonesian inclusive primary schools. Using a qualitative approach involving in-depth interviews, classroom observations, and document analysis, the researchers found that collaboration between regular teachers and special education teachers was a central practice for the success of inclusion. This collaboration took the form of joint lesson planning and the exchange of pedagogical expertise. The study also emphasized the importance of visual aids and sign language in improving academic understanding and promoting classroom interaction.

- **Villarente and Donayre (2025)** (Villarente & Donayre, 2025)

Aimed to identify the best classroom practices from the perspectives of teachers working in inclusive mainstream classrooms. The sample included 18 teachers, and data were collected through interviews. Findings indicated that the most effective strategies included reorganizing the classroom environment to ensure visual accessibility, peer support mechanisms that foster cooperative learning, and ongoing collaboration with families and special education teachers to sustain inclusive practices.

- **Açar and Demiralp (2025)** (Açar & Demiralp, 2025)

Explored the role of educational technology and the strategies used by teachers to support the inclusion of deaf students. The study involved 12 experienced special education teachers and relied on semi-structured interviews. Findings revealed that successful pedagogical practices included the preparation of Individualized Education Plans (IEPs), and the use of sign language and lip reading as essential tools for academic communication. The study also confirmed the effectiveness of interactive technologies such as smart boards and educational applications in enhancing classroom engagement and communication. Moreover, it stressed the need for continuous teacher training to ensure the optimal use of these technologies.

- **Synthesis and Discussion:**

Through the analysis and discussion of previous studies on pedagogical practices supporting the inclusion of students with special educational needs, it becomes clear that most international research agrees that the success of inclusion depends not only on political will or inclusive policies, but also on the adoption of flexible pedagogical practices and appropriate assistive technologies by teachers.

A central finding across these studies is the importance of collaborative teamwork between general education and special education teachers. Joint planning, experience sharing, and professional collaboration were highlighted as essential mechanisms for creating effective inclusive environments. In addition, the development of individualized education plans and the continuous exchange of pedagogical expertise

were found to be key practices that ensure that instructional content and methods meet each learner's unique needs.

Furthermore, all reviewed studies emphasized the critical role of modern educational technologies, such as smart boards and interactive applications, in improving classroom participation and academic comprehension, especially when combined with visual media and sign language. These findings are consistent with the principles of the Salamanca Statement (UNESCO, 1994), which underlined the necessity of providing pedagogical adaptations and technological support as prerequisites for achieving equitable and inclusive education.

In contrast, the local Algerian study (Yahiaoui, 2023) revealed a divergent reality, where traditional teaching practices still predominate, with little to no use of visual aids or educational technologies. This reflects a substantial gap between international orientations and field realities in Algeria. Therefore, the findings call for a comprehensive review of both pre-service and in-service teacher training programs, ensuring that they incorporate modern pedagogical and technological competencies aligned with international standards of inclusive education.

3. Discussion of the Third Research Question: Barriers and Challenges to Effective Inclusion:

To answer the third research question — What are the main barriers and challenges identified in the educational literature that hinder the effective inclusion of students with special educational needs in mainstream schools? — a number of studies were analyzed, each addressing the topic from a different perspective. The studies are presented chronologically, with emphasis on their objectives, methodology, sample, data collection tools, and major findings, as follows:

- **Bakhouche et al. (2020** (Bakhouche et al., 2020)**:**

Explored the perceptions of primary school teachers regarding the inclusion of students with special needs in regular schools. Using a descriptive method and a questionnaire administered to 30 teachers across three institutions, the study found that teachers generally held positive attitudes toward inclusion. However, it also showed that neither academic qualification nor years of experience had a statistically significant impact on teachers' attitudes, indicating that professional experience alone does not necessarily translate into better inclusive practices.

- **Toudret and Hadi (2023)** (Hadi & Toudret, 2023)**:**

sought to identify the difficulties hindering the academic inclusion of students with special needs as an educational policy. The researchers used a descriptive approach and applied a 32-item questionnaire (previously developed by Saber Bahri and Khermoush, 2022) to a randomly selected sample of 65 primary school teachers in M'sila province, Algeria. Findings indicated that inclusion faces multiple levels of barriers: the most significant were school-related barriers, including lack of pedagogical resources and inadequate classroom environments. These were followed by teacher-related barriers, such as insufficient specialized training and limited mastery of inclusive teaching methods. The study also reported peer-related obstacles (lack of cooperation and support) and learner-related challenges, such as low motivation, poor self-esteem, and feelings of inferiority.

- **Jarrar (2024)** (Jarrar, 2024)**:**

Examined the institutionalization of inclusive education within the Jordanian educational system. Institutionalization was defined as the process of embedding inclusion principles within the organizational, legal, and procedural structures of schools so that inclusion becomes a permanent and integrated part of the educational framework rather than isolated individual initiatives. Using a qualitative approach that combined document analysis and interviews with administrators, policymakers, and inclusion coordinators, the study revealed a clear gap between policy and practice. Efforts largely remained at the legislative level without effective implementation. The results highlighted deficiencies in infrastructure, lack of assistive technologies, absence of sustained teacher and administrator training programs, and lack of monitoring and evaluation mechanisms — all of which hinder the realization of inclusion according to international standards.

- **Dewi, Sudadio and Fadlullah (2024)** (Dewi et al., 2024)**:**

Analyzed the reality of inclusive education in Indonesian primary schools, focusing on the challenges encountered during implementation. Using a qualitative approach with in-depth interviews and document analysis, the study identified major obstacles including insufficient financial resources, a shortage of qualified personnel, weak coordination among stakeholders, and the lack of adaptive pedagogical materials to meet learners' diverse needs.

- **Kiiza and Mwesigwa (2025)** (Kiiza & Mwesigwa, 2025) **:**

Conducted a descriptive analytical study in Uganda to examine the challenges facing pedagogical practices in inclusive classrooms. The sample included 270 participants (teachers, students, and administrators). Using questionnaires and interviews, the researchers found that the main barriers included a shortage of educational and technological resources, insufficient specialized training for teachers, and the persistence of social stigma toward learners with hearing impairments, which hinders both academic and social inclusion in mainstream classrooms.

- **Synthesis and Discussion:**

Analysis of these studies reveals a strong convergence with the Salamanca Statement (UNESCO, 1994), which emphasized the need to provide pedagogical adaptations, continuous teacher training, and mobilization of human and material resources as essential conditions for successful inclusion.

In the Algerian context, Toudret and Hadi (2023) found that inclusion remains largely theoretical rather than practical, due to the lack of pedagogical resources, insufficient training, weak teacher collaboration, and the psychological challenges faced by students with disabilities.

Similarly, Jarrar (2024) in Jordan highlighted a systemic gap between declared policies and field implementation, characterized by inadequate infrastructure, lack of assistive technologies, limited teacher preparation, and the absence of evaluation mechanisms all of which hinder institutional progress toward inclusive education.

In Indonesia, Dewi, Sudadio and Fadlullah (2024) pointed to financial constraints, lack of coordination, and insufficient expertise, echoing the Salamanca Statement's concern about the need for comprehensive and cross-sectoral strategies.

Finally, Kiiza and Mwesigwa (2025) in Uganda added an important social dimension, stressing that persistent stigma and negative societal attitudes remain critical barriers to inclusion a challenge also identified in the Salamanca framework, which called for promoting equality, justice, and attitudinal change in educational cultures.

A comparative reading of the studies across contexts shows a shared understanding that teacher preparation and flexible pedagogical practices are vital for inclusion. However, significant disparities persist between international findings, which report progress through technology use, individualized education planning, and collaborative institutional practices (Açar and Demiralp, 2025; Villarente and Donayre, 2025), and local Algerian studies (Yahiaoui, 2023; Sayed and Taba'a, 2021), which indicate a continued reliance on traditional methods and limited use of visual or technological tools.

This gap highlights a disconnect between inclusive education policies and their practical implementation, particularly in Algeria, where educational reforms have endorsed the principle of inclusion since 1998, yet funding shortages, insufficient teacher training, and weak monitoring mechanisms have rendered these policies largely symbolic. By contrast, studies from Indonesia and the Philippines demonstrated modest yet effective field initiatives based on teacher collaboration and the use of low-cost educational technologies.

The comparative analysis suggests that the central challenge in Algeria lies not only in resource scarcity, but also in the lack of institutional collaboration and sustainable

professional development. Moreover, persistent social barriers—such as stigma, low learner motivation, and limited community acceptance—further complicate the realization of inclusion.

- Summary of the Main Challenges Identified:
  - ✓ Insufficient pre-service and in-service teacher training to prepare educators for inclusive education.
  - ✓ Lack of educational resources and assistive technologies to support learners with special needs.
  - ✓ Weak collaboration among teaching teams and limited parental involvement, resulting in fragmented and less effective inclusion.
  - ✓ Psychological and social barriers among students with special needs and their families, such as stigma and low self-esteem.

Conclusion:

The findings of the systematic review of recent educational literature (2020–2025) indicate that the inclusion of students with special educational needs in mainstream schools is no longer a secondary option but a strategic orientation consistent with the principles of the Salamanca Statement (1994), which enshrined the right to education within inclusive environments that ensure equity and equal opportunities.

However, the evidence reveals a clear gap between the international reference framework and its actual implementation in practice. This gap is mainly reflected in the insufficient teacher training, the limited pedagogical adaptations, and the scarcity of institutional and technological support required to make inclusion effective.

Building upon these findings, a conceptual framework can be proposed in which the success of inclusion depends largely on teachers' ability to adapt their pedagogical practices in harmony with the demands of inclusive education, while simultaneously overcoming structural and social barriers.

This vision calls for the adoption of an integrated approach grounded in continuous professional development, the provision of appropriate technological resources, and the transformation of prevailing attitudes—thereby ensuring the transition from theoretical policy frameworks to practical, field-based applications that genuinely reflect the principles of educational inclusion.

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