Challenges and teacher competencies in the inclusive education approach in Colombia

Desafíos y competencias docentes en el abordaje de la educación inclusiva en Colombia

Desafios e competências dos professores na abordagem da educação inclusiva na Colômbia

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Abstract

Introduction: In the contemporary context, inclusive education has acquired significant relevance at a global level, seeking to guarantee access to an excellent education for each student, regardless of their abilities, and promoting an inclusive and diverse environment in educational establishments. **Objective:** The central purpose of this review article is to expose the regulations in Colombia, the characterization of inclusive students, the use of technology in educational processes, as well as the strategies and methodologies to promote inclusive education, including collaboration, attitudes and the structural changes necessary for its effective implementation. **Method:** A methodology based on the interpretive paradigm with a qualitative approach was applied. An exhaustive review of recent literature related to inclusive education was carried out and data recording sheets were used as an instrument for collecting information. **Results:** Among the findings, the importance of teacher training and interprofessional collaboration stands out to guarantee an inclusive education adapted to the demands of students with disabilities. **Conclusion:** It is concluded that the strengthening of pedagogical, technological, scientific and ethical competencies in teachers is essential to implement inclusive strategies and promote a respectful and equitable educational environment.

Keywords: Inclusive education; Teacher training; Assistive technology for people with disabilities; Educational policy; School environment.

Resumen

Introducción: En el panorama contemporáneo, la educación inclusiva ha adquirido una relevancia significativa a nivel global buscando garantizar el acceso a una educación de excelencia a cada estudiante independiente de sus capacidades y fomentando un ambiente inclusivo y diverso en los establecimientos educativos. **Objetivo:** El propósito central de este artículo de revisión es exponer las normativas en Colombia, la caracterización de los estudiantes inclusivos, el uso de tecnología en los procesos educativos, así como las estrategias y metodologías para promover una educación inclusiva, aun la colaboración, las actitudes y los cambios estructurales necesarios para su implementación efectiva. **Metodología:** Se aplicó una metodología fundamentada en el paradigma interpretativo con enfoque cualitativo. Se llevó a cabo una revisión exhaustiva de literatura reciente relacionada con educación inclusiva y se utilizaron fichas de registros de datos como instrumento de recolección de información. **Resultados:** Entre los hallazgos, se destacan la importancia de la formación docente y la colaboración interprofesional para garantizar una educación inclusiva y adaptada a las demandas de los estudiantes con discapacidad. **Conclusiones:** Se concluye que el fortalecimiento de competencias pedagógicas, tecnológicas, científicas y éticas en los docentes son fundamentales para implementar estrategias inclusivas y promover un ambiente educativo respetuoso y equitativo.

Keywords: Educación inclusiva; Formación de profesores; Tecnologías de apoyo para personas con discapacidad; Política educativa; Ambiente escolar[1]

1 Los términos clave han sido recuperados a partir del Tesauro Universidad de Barcelona.

Resumo

Introdução: No cenário contemporâneo, a educação inclusiva adquiriu relevância significativa em nível global, buscando garantir o acesso a uma educação de excelência a todos os alunos, independentemente de suas habilidades, e promovendo um ambiente inclusivo e diversificado nos estabelecimentos de ensino. **Objetivo:** O objetivo central deste artigo de revisão é expor as regulamentações na Colômbia, a caracterização dos alunos inclusivos, o uso da tecnologia nos processos educacionais, bem como as estratégias e metodologias para promover a educação inclusiva, incluindo a colaboração, as atitudes e as mudanças estruturais necessárias para sua implementação efetiva. **Metodologia:** Foi aplicada uma metodologia baseada no paradigma interpretativo com uma abordagem qualitativa. Foi realizada uma revisão abrangente da literatura recente relacionada à educação inclusiva e foram utilizadas fichas de coleta de dados como instrumento de coleta de dados. **Resultados:** entre os resultados, destaca-se a importância do treinamento de professores e da colaboração interprofissional para garantir uma educação inclusiva adaptada às demandas dos alunos com deficiência. **Conclusões:** Conclui-se que o fortalecimento das competências pedagógicas, tecnológicas, científicas e éticas dos professores é fundamental para implementar estratégias inclusivas e promover um ambiente educacional respeitoso e equitativo.

Palavras-chave: Educação inclusiva; Formação de professores; Tecnologias assistivas para pessoas com deficiência; Política educacional; Ambiente escolar.

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Introduction

In recent times, inclusive education has undergone a significant change in its perception and relevance. Inclusive education has a long history, dating back to the reformist pedagogies of the first half of the 20th century. John Dewey, the famous American philosopher and educational reformer, together with his wife, addressed the problem of the exclusion of people with disabilities from regular school practices. They experienced how their own adopted and disabled son was at different times excluded from various schools. In their view, schools should be places where all participants are considered equal, despite their many differences (Danforth, 2019, cited in Wildemeersch and Koulaouzides, 2023). Inclusive education, once considered a concern limited to small groups in different parts of the world, has evolved to con- vert into an issue of global concern that impacts the political, economic, and social spheres of various nations.

According to Unesco (2005), the objective of inclusive education is to promote that both educators and students feel at ease in the midst of diversity, seeing it not as a barrier, but as a challenge and a possibility to improve teaching methodologies and learning processes. In this context, the 2030 Agenda for Sustainable Development strongly highlights education as an essential pillar for the achievement of all the Sustainable Development Goals (SDGs). Specifically, SDG four focuses on education, recognizing its importance and its role in promoting education that is both inclusive and of high quality, open to all (United Nations, 2023). As UN Resolution 70/1 (2015) clearly states: "to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all".

The focus of this article is primarily on promoting inclusive education, with an emphasis on addressing students' disabilities. Although there are various dimensions of student diversity, such as ethnicity, gender, sexual orientation, and faith, it is critical to underscore that our central purpose is to comprehensively and deeply address the inclusion of those students who face challenges related to disabilities. Through this perspective, we aspire to create an educational environment in which every student, regardless of physical or cognitive abilities, can access a quality education and reach his or her full potential.

According to Fernández Villacrés et al. (2023), in the 2011 World Health Organization (WHO) and World Bank (WB) report, "more than one billion people, approximately 15% of the world's population, face disabilities" (p. 12363), highlighting a higher incidence in developing nations. This fact reveals the global dimension of people living with disabilities and underscores the need to address their needs and rights. The fact that the prevalence of disability is higher in developing countries suggests that there are inequalities in access to adequate health, education and support services. This highlights the importance of promoting inclusive policies and ensuring equal opportunities for people with disabilities worldwide.

In Colombia, Decree 1421 of 2017 establishes guidelines to provide inclusive education to persons with disabilities in the educational environment. This regulation establishes policies that seek to ga- rantee an adequate and equitable education to students as a whole, considering the parti- cularities and specific needs of those with disabilities. In addition, this regulation describes

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appropriate accommodations, such as measures, changes, strategies, resources or necessary changes in the educational system and school administration. These accommodations are designed and implemented on an individualized basis to facilitate the active participation and inclusion of students with disabilities in educational processes (Quintero Ayala, 2020), recognizing that each student has his or her own unique strengths and learning needs, and educational systems must appreciate and adapt to this diversity (Woodcock et al., 2022).

The educational center is fundamental to promote inclusive measures that address diversity in an equitable and quality manner, based on student interests and motivations (Perlado Lamo de Espinosa et al., 2019). Both teachers and school principals are fundamental elements for inclusion, although they are not the only ones. Initial and continuing teacher training play a prominent role in the success of the necessary transformations, and both higher education institutions and ministries of education have a responsibility to ensure that these processes are carried out effectively (Duk et al., 2019).

Some of the concerns of teachers are manifested in the following questions: how can I direct my resources effectively in a class with many students, and how can I provide assistance to a small group without neglecting the rest of the students (Cisternas León and Lo- bos Gormaz, 2019, p. 43). With an approach focused on teacher training and the active participation of all the actors involved, the way will be opened towards an educational system that promotes inclusion and equity, granting each student the possibility of reaching his or her maximum performance.

In recent decades, the field of educational inclusion has been widely considered by various educational actors, non-profit organizations and governments of different countries, finding along the way a broad spectrum of needs of some individuals and opportunities to improve the service provided to them in different educational institutions.

At the international level, Murudumbay Campoverde (2020) focused on an educational institution where various forms of inclusion were implemented, such as adapted curricular plans, personalized education and support in the classroom environment. Her findings indicated that teachers in this institution were aligned with inclusive education policies in Ecuador and with the guidelines of the educational institution itself.

In the study conducted by Massouti (2019), teachers' learning experiences during their university training and how they apply the knowledge acquired in their professional practice in diverse school contexts were examined. This author found that a solid training in inclusive and pedagogical strategies has a positive impact on teachers' ability to manage diverse classrooms and promote inclusive education. In addition, the study revealed that adequate funding from the province of Ontario (Canada) is crucial for implementing better organizational and instructional strategies in teacher training, which in turn improves the effectiveness of inclusive educational programs. These findings are relevant for reflection on the topic of study, as they underscore the importance of adequate teacher training and sufficient resources to achieve inclusive and quality education.

The ideas put forward are closely related to what is stated by Azorín-Abellán (2018), who states that it is essential to have efficient tools for recognizing both the points

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The primary objective of this identification was to understand which aspects were being managed effectively and which areas needed improvement, providing teachers with a more aware and objective perspective of their current situation. The primary objective of this identification was to understand which aspects were being managed effectively and which areas needed improvement, providing teachers with a more conscious and objective perspective of their current situation.

In that order of ideas, in the Colombian scenario, an analogous situation is presented in terms of educational inclusion, which is evidenced in the research conducted by David and Brown (2022), in which they highlighted the lack of educational policies aimed at strengthening teacher training to improve classroom instruction, as well as the lack of training in inclusive education, the scarcity of resources and support teachers.

In the study conducted by Cely Betancourt and Abreus González (2022), they carried out a comparison between the situation of educational inclusion in Colombia and that of countries such as Spain and France, in which they identified similarities in policies and laws, but detected an insufficiency of the budget allocated to teacher training and school infrastructure in Colombia. In addition, they highlighted the need for evaluation and monitoring systems to measure the progress of the strategies implemented according to the policies and plans designed.

Teachers face the complex challenge of managing classrooms with students with diverse personalities, a challenge that is intensified by the growing number of students with disabilities. This reality requires developing broader and more effective skills to address the variety of learning styles. While some students learn quickly, others need more time and attention to understand the content. In addition, difficulties in implementing inclusive pedagogy arise from the different traditions and standards present in multicultural countries (Namanyane and Shoan, 2021).

In summary, different authors highlight the importance of educational inclusion in various countries, addressing teacher training, effective policies and resources as key elements. Furthermore, they stress the need for academic integration strategies and accompaniment to improve the adaptation and permanence of students in the educational system, promoting an inclusive and respectful pedagogy.

Methodology

The research methodology for the study of inclusive education was based on an interpretative perspective and a qualitative approach. This methodology was chosen because it seeks to understand and describe the qualities, characteristics and relationships associated with the object of study, in this case, inclusive education and its aspects related to Colombian regulations, student characterization, collaboration between teachers, parents and other professionals, and inclusive technologies in educational institutions. These categories emerged during the exploratory phase of the study as relevant topics for the research.

The methodological approach adopted consisted of an exhaustive review of the specific literature and a

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This was based on a systematic search for updated articles and studies. A search was conducted in academic databases, including Scielo, Scopus, Dialnet Plus and Google Scholar, and institutional repositories, to identify research and theses related to educational inclusion and its specific aspects. Table 1 shows the categories of analysis along with the typology and number of articles used in this research.

Table 1.

Categories of analysis

Categories	Type and quantity of items
Regulations and challenges for teachers in Colombia	15 articles. Regulations establishing clear guidelines on how to deal with diversity in the classroom, which help teachers adapt their pedagogical practices. Review and reflection articles.
Characterizing inclusive students and addressing specific needs	12 items. Focus on the identification and attention to the particular needs of students with special needs or disabilities. Documentary and descriptive analysis articles.
Adaptation, technology and approaches to educational inclusion	5 articles. Exploration of interdisciplinary research addressing adaptive strategies, technology use and inclusive pedagogical approaches in the educational context. Case report and review articles.
Collaboration, attitudes and structural changes in inclusive education.	7 articles. Addresses topics such as collaboration among teachers, parents and other education professionals, promoting respectful and accepting attitudes toward diversity in the classroom, and changing educational policies and practices. Research articles.

Source: Own elaboration.

This search yielded 141 matches, and then an analytical review was carried out to select the most relevant and updated documents on inclusive education. The methodological process used ensured a rigorous and systematic approach to understand and analyze the relevant aspects of inclusive education from a documentary and qualitative perspective. A thorough search of the selected databases was carried out using keywords related to inclusive education, inclusive technologies, pedagogical approaches to inclusion and collaboration in education. These keywords were also used to identify associated categories. Criteria for inclusion and exclusion were used to select the most relevant documents.

To organize and analyze the information collected, a protocol template was used in Microsoft Word. This tool facilitated the systematization of the data and made it possible to compare results and identify similarities and differences between the studies. The template contained information on the author, the year of publication, the title of the article or thesis, an abstract, as well as the objectives, the methodology used and the main findings related to educational inclusion.

The data analysis was qualitative and was carried out inductively. Two approaches were designed to develop the research. The first of these was organized in various sections that included elements such as language, period of study, keywords, related articles and research methodology. The second approach focused on the evaluation criteria, both for inclusion and exclusion, which covered the essential themes of the research, as well as the strategy used to extract the data. Table 2 illustrates precisely the action plan of the exploratory phase, showing the essential elements of its implementation.

Subsequently, the procedure used for the research of information sources is detailed.

Table 2.

Categories of analysis

Language	Spanish, English
Time range	2017-2023
Termshighlighted	Educational inclusion, inclusive education, diversity in the classroom, equitable access to education, special educational needs, inclusive learning environments, inclusive educational inclusion policies, teacher and family collaboration for inclusion, inclusive teaching strategies
	Information sourcesDialnet Plus, Scielo, Google Scholar, Scopus, Web of Science, in digital format.
Search strategies	Research was conducted using specific terms, limiting the search based on previous results. In addition, personal pages of experts were consulted and citations and references were reviewed.

Source: Own elaboration.

Information resources evaluation procedure

This protocol establishes the standards and procedures for reviewing documentary references related to the research topic.

Standards of review

The review process involved tracking documents related to the central theme. The relevance of each document was verified in terms of research problems, objectives, authors and year of publication. The abstracts and introductions of each document were examined to determine their relevance and usefulness for the research.

Inclusion criteria

In order to carry out the selection of the documents, admission conditions were defined that included key related terms, research problems, methodological approach and conceptual structure, all of them linked to the subject of the study.

Exclusion criteria

In the exclusion process, documents that lacked a direct relationship with the topic in question were identified and discarded. We also excluded articles that did not come from scientific journals or databases, as well as those documents that did not meet the necessary research criteria. In addition, publications that were outside the time period relevant to the study were excluded.

Assessment of identified findings

A total of 141 documents were located and entered into a document analysis matrix for effective organization, supervision and evaluation of the information. Subsequent to this procedure,

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57 documents were chosen that were appropriate to the topic of interest. From these selected documents, the most relevant and useful information for the purpose of the study was extracted.

To evaluate the relevance and adequacy of the contents and sources of information, various criteria were applied, including reliability and integration capacity. The reliability criterion consisted of verifying the authorship and experience of the author in the topic addressed by means of a brief bibliographic review. The impact and classification of the journals in which the documents were published were also considered, as well as the information recorded in the data sheets. The theoretical pro- fundity of the document and its correspondence with the theoretical foundations explored in this article were evaluated, considering the opinion of three researchers with a doctorate in Education.

In addition, priority was given to the inclusion of current literature, especially from the last five years, and the Mendeley tool was used to ensure a more rigorous selection of information. In terms of integration capacity, we analyzed the relationships and comparisons of the study with other contributions in order to evaluate the contribution it offers to the field of research.

Results

Regulations and challenges for teachers in Colombia

The Colombian context is especially relevant due to various laws and decrees that regulate inclusive education. For example, the Political Constitution of Colombia (1991) establishes education as a right and a public service. In addition, several laws, such as Law 115 of 1994 and Law 361 of 1997, focus on the social integration of people with disabilities. Educators should be aware of these laws to ensure that their actions promote inclusion and avoid discrimination (Guevara Salazar and Vélez Villaquirán, 2020; Lastre et al., 2019).

In the work of teaching, educators should be fully aware of these laws and decrees to ensure that their actions are aligned with the values of integration and equity, avoiding any form of discrimination. Law 762 of 2022 mentions that "persons with disabilities must have the means and resources to promote independent living, self-sufficiency and full integration, under equal conditions, to society" (Serrano-Guzmán et al., 2019, p. 90). In other words, it is essential to provide people with disabilities with the resources and supports required for them to achieve autonomy and active participation in the community.

Law 1145 of 2007 defines disability as a set of conditions that affect the self-reliance of people. It also seeks to establish a national disability system to guarantee the human rights of people with disabilities (Aristizábal Gómez, 2021; Lorduy Castro and Ocampo González, 2022). It is essential that teachers are sensitized to this complexity and focus on adapting their pedagogical strategies to address the heterogeneity present in their students. Regardless of their disability status, it is essential that each individual receives respect, ensuring that they feel safe and confident in their learning process and the development of skills for their full integration into society (Khanna and Kareem, 2021).

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In line with this perspective, Law 1346 of 2009 "seeks to promote, protect and guarantee the full enjoyment, under equitable conditions, of all human rights and fundamental freedoms by persons with disabilities, and to foster respect for their inherent dignity" (Ministry of Health and Social Protection, 2014, cited in Luna Zaenz and Jácome Mora, 2019, p. 104). According to Rincón Ca- david et al. (2019), this law "establishes that persons with disabilities have equal rights, freedom of expression and cannot be discriminated against because of their condition" (p. 3). It is the task of educators to ensure that their pedagogical methods do not continue with stereotypes or promote discrimination, but rather encourage respect and inclusion in the classroom.

In this context, Law 1618 of 2013 establishes provisions to guarantee the rights of people with disabilities, especially children, and emphasizes the importance of collaboration between teachers and families (Garzón Daza, 2020; Decree 1421 of 2017). Teachers play an essential role in working closely with families to ensure that students with disabilities receive the required attention and support services indispensable for their comprehensive development.

Decree 366 of 2009, aimed at certified territorial entities that offer pedagogical support services for the promotion of inclusive education, implies that teachers must work in collaboration with these entities to recognize and address barriers to learning and participation of students with disabilities and outstanding abilities.

In a study on Decree 1421 of 2017, the importance of effective accompaniment in institutions is highlighted, required through good planning, collaborative work and fewer students per classroom to get to know each student better (Díaz-Piñeres et al., 2020, p. 286). In this framework, it can be stated that "this standard reflects the culmination, at least in terms of the regulation of the educational system, of the transition from a special and segregated education approach to an inclusive education approach" (Viloria Rivera, 2022, p. 168). Teachers have the opportunity to lead this approach, creating welcoming and respectful environments where all students, regardless of their differences, feel valued and can develop their potential.

From this perspective, Reina Ávila and Lara Buitrago (2020) argue that "the efforts to guarantee inclusive education in Colombia lie in the access, management and monitoring of programs, for the achievement of activities that benefit the population with disabilities" (p. 7). In summary, the role of the teacher in the Colombian educational context is of great relevance to ensure the effective implementation of educational policies that promote inclusion and the full exercise of the rights of persons with disabilities. This is essential to build a more just and equitable society through quality education that encompasses the entire population.

Characterization of inclusive students and addressing their specific needs

Teacher training plays a crucial role in the characterization and typification of inclusive students. It is essential to understand their educational needs and foster a more active interaction between the student, the family and the school, to detect obstacles, skills and advantages that contribute to the effective development of the educational process (Pacheco Mera and Mera Leones, 2023). Likewise, Cruz Vadillo (2019) highlights the importance of a collaborative diagnostic approach to characterize students with disabilities, identify their abilities and learning preferences to ensure their full participation without significantly modifying the curriculum, and thus preserve the inclusion, respect and dignity of the student.

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In addition, Herrera-Rodríguez and Guevara-Fernández (2022) highlight the research trajectory of prominent scientists in the field of understanding learning difficulties and exceptional abilities of students. In this context, the importance of teacher training becomes evident, as it is essential to adequately interpret psychological tests that provide relevant information about students' behavior and level of disability (Nicotra et al., 2018; Nootyaskool and Ounsrimung, 2017, cited in Jimpikit Cunambe et al., 2023). Teachers' work and academic experience enables them to implement adapted pedagogical strategies and promote an inclusive educational environment.

According to Rivas Arenas (2019), ten disabilities and two exceptional conditions are recognized in inclusive schools, including gifted and talented students. This further highlights the importance of teacher training to create inclusive educational environments, where all students receive adequate education, regardless of their abilities.

Internationally, the presence of socioemotional difficulties has been observed in students with hearing or visual disabilities, which highlights the importance of teachers using their personal and experiential skills to address emotional aspects in their educational practice (Mar- tínez and Rosas, 2022). In addition, the Diagnostic and Statistical Manual of Mental Disorders (2013), cited in Quintero López et al. (2021), reflects that intellectual disabilities can affect intellectual capacity and adaptive skills, but the support of teachers, family and other educational actors can positively influence student performance.

Some research suggests potential advantages for visually impaired students due to their auditory skills and memory capacity, although it is also mentioned that their reading and writing skills may represent challenges due to slower reading speed and the use of Braille (Garrido Feijóo and Silva Baldonedo, 2023). Likewise, for the comprehension of abstract concepts dependent on visual information, teachers must verbally express and explain the terms and concepts that facilitate their learning. For this reason, trained teachers can use their work and academic experience to allocate more time for reading and writing activities, and provide materials in accessible formats, which are fundamental to their educational success (Sánchez et al., 2019).

Teacher training in physical-motor disability can help teachers overcome potential barriers and prejudices that may arise in their educational practice. This disability encompasses limitations in the structure and functioning of the musculoskeletal and nervous system, including anatomical deficiencies and psychological factors that affect psychomotor development and the execution of movements (Sanz Labrador, 2023). Teacher training in this context involves not only acquiring theoretical knowledge about the specific characteristics and needs of students with physical-motor disabilities, but also developing practical skills to create an inclusive and accessible environment. This includes learning to use adapted physical and technological resources, providing individualized support, and fostering collaboration with other education professionals and experts in physical and occupational therapies.

Finally, Curry et al. (2024) note that some teachers pair students with learning challenges with higher achievers, allowing the more able students to act as mentors for their peers. This peer-to-peer mentoring has become a common practice.

The teacher's workload is lightened by a common classroom practice. On the other hand, other teachers choose to group students according to their performance and divide them into separate groups. This makes it easier to assign reading or math assignments appropriate to the needs and abilities of the students in each group.

Teacher training is essential to understand the needs of inclusive students, provide emotional support to students with disabilities, develop specific skills, and overcome barriers and biases to achieve an equitable and welcoming educational environment.

Adaptation, technology and approaches to educational inclusion

Inclusive education represents a significant challenge for teaching practice and requires the adaptation of strategies and resources to meet the needs of children with special needs. Fitri (2022) emphasizes the relevance of adjusting didactic materials, teaching methods, media, available funds, classroom management and the learning environment, in order to provide an inclusive and developmentally appropriate educational environment for these students, aligned with the fundamental objective of promoting the application of knowledge towards problem solving and skill acquisition (Londoño-Giraldo et al., 2023).

In addition, this adaptation and improvement in inclusive education requires adequate preparation of teachers. Teacher training in inclusive teaching strategies and knowledge of assistive technologies, such as speech-to-text technology (STT), are essential to support students with different learning needs (Matre, 2022). STT offers a beneficial writing alternative for students with writing difficulties, such as dys- lexia and dysgraphia, promotes greater participation in written activities, and contributes to a more inclusive educational environment in secondary education.

On the other hand, Quintero et al. (2019) have analyzed the benefits, applications, and challenges of augmented reality (AR) in the field of inclusive education. Their research provides valuable guidance for educators and researchers seeking to create effective learning scenarios for students with diverse educational conditions. AR is shown to be a promising tool for fostering inclusion, and the importance of exploring its application in fields less explored in the existing literature, such as engineering, manufacturing, and construction, is highlighted to further expand the possibilities for educational inclusion.

This joint research highlights the need for teachers to be prepared to adapt pedagogical approaches and use inclusive technologies in the classroom, for which it is essential, as Sahani and Patel (2023) state, "to adapt the educational environment to meet the needs of students by modifying content, teaching processes, assessment and the physical environment", in order to foster an environment conducive to the integral development of all students and promote a truly inclusive education in Colombia.

Collaboration, attitudes and structural changes in inclusive education.

In the area of teacher training and practice, the relevance of in- terprofessional collaboration between nurses, therapists and teachers to support students with special needs is highlighted.

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As highlighted by Ní Bhroin and King (2020), this collaboration provides specialized medical care, speech and language therapy, and occupational therapy, promoting students' academic progress and appropriate development. In order for teachers to effectively address these challenges, it is essential to receive adequate training to enable them to collaborate with other health and education professionals to address the individual needs of each student, ensuring their educational success and overall well-being.

On the other hand, Paseka and Schwab (2020) conducted research on parents' attitudes toward inclusive education and the factors that influence them. The results reveal that, in general, parents have a positive or neutral attitude towards inclusive education, although these attitudes vary according to the type of disability. It is important to highlight that the educational level of parents influences their attitudes, as those with higher educational levels tend to have more positive attitudes towards inclusive education.

The findings highlight the importance of raising awareness about inclusion and providing training to both parents and educational communities through effective communication, fostering relationships of trust and cooperation. In teaching practice, this translates into the implementation of inclusive approaches in the classroom, where the relevance of working closely with parents and their fundamental role in education is recognized.

Regarding teacher training and the academic dimension, Vaillant (2011), cited in Reina Ávila and Lara Buitrago (2020), highlights two main challenges in Latin America in relation to teacher training and educational policies: the insufficient preparation of educators and the lack of significant changes in educational policies. Addressing these challenges requires greater investment in teacher training and support, as well as structural reforms in the education system to achieve inclusive and equitable education. On the other hand, Delgado-Valdivieso et al. (2021) mention:

Inclusion at the early childhood level works with stimulation as a strategy for prevention, optimization of capacities and compensation for situations of inequality. In addition, they highlight the importance of the active participation of children, family and professionals in this process through play, learning and joint work. (p. 30).

Teacher training plays a key role in this area, enabling teachers to acquire skills to implement stimulation strategies and work collaboratively with families and other professionals.

Erazo et al. (2021) emphasize that, in order to meet the needs of people with disabilities in educational institutions, it is essential to make changes both in infrastructure and in teaching and evaluation approaches. They stress the importance of teachers, who must have specialized training to serve these students. Providing them with the appropriate tools is essential to ensure an enriching education for these children and young people.

Regarding teaching practice, López Marí et al. (2022) show in their research that "a large number of teachers express insecurity due to their lack of knowledge about autism spectrum disorder, educational inclusion and curriculum management in the classroom" (p. 102), and in certain scenarios, they failed to understand the importance of incorporating these students in the process.

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On the other hand, in the school setting, collaboration involves the cooperation of two or more teachers together with other pedagogical specialists to design inclusive learning environments and provide support for students' personal and social development (Finkelstein et al., 2019, cited in Pozas and Let- zel, 2023).

In summary, collaboration among professionals, the promotion of positive attitudes towards i n c l u s i o n and the implementation of structural changes in educational policies are crucial elements to ensure the success and well-being of all students in diverse and enriching educational environments.

Discussion

From different theoretical perspectives, crucial aspects for the successful implementation of inclusive education in educational settings are identified. However, questions and challenges arise around how to achieve effective collaboration between teachers, therapists and health professionals to provide comprehensive support to students with special needs. How can possible communication and coordination barriers between these different actors be overcome to ensure holistic care?

Successful implementation of inclusive education in educational settings requires effective collaboration between teachers, therapists and health professionals. However, challenges arise in the coordination and communication between these actors to provide comprehensive support (Londoño Montoya et al., 2019). To address this challenge, training in interprofessional collaboration and the creation of multidisciplinary teams in schools is recommended. This promotes a cohesive approach to student care (Gómez-Nashiki and Quijada-Lovatón, 2021).

The essential collaboration between teachers, therapists and health professionals in inclusive education points to challenges in coordination. It is recommended to use case studies and practical examples, maintain constant evaluation and promote positive parental attitudes towards educational inclusion, with specific strategies for different types of disabilities. First, teachers can establish open and constant communication with parents. Maintaining clear and regular channels of communication, such as e-mails, face-to-face or virtual meetings, and newsletters, allows progress, goals, and challenges to be shared in a transparent manner (Frontado de Vi- llamizar, 2020).

Conducting specific workshops and training sessions for parents is another valuable strategy. Teachers can design and facilitate sessions that address topics such as supporting learning at home, understanding their children's needs, and fostering specific skills. These actions strengthen the relationship between teachers and parents by sharing knowledge and common goals (Mendoza Santana, and Cárdenas Sacoto, 2023). In addition, teachers can play a guiding role for parents by providing educational resources and personalized suggestions, thus showing teachers' commitment to student success and helping parents feel more confident in their educational role.

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Strengthening teachers' pedagogical, technological and emotional competencies is fundamental for successful inclusive education. However, concerns arise about how to provide adequate and ongoing training to teachers so that they can address the diverse needs of students and use technological resources effectively.

Training in technology and resources is crucial. Training in the use of assistive software, assistive devices and accessible platforms will enable them to meet the needs of students with diverse abilities. However, Herrera Pérez (2020) highlights the existence of a "disparity in terms of infrastructure, human and physical resources in the different schools in the country; balancing these conditions requires a large investment by local and national authorities" (p. 134). This investment should not only focus on teacher training, but also on improving educational infrastructure, providing resources and hiring additional personnel in areas where needed.

In summary, the implementation of inclusive education raises questions about interprofessional collaboration, parental attitudes, and teacher training. The answers may lie in effective communication strategies among professionals, awareness programs for parents, and ongoing teacher training programs adapted to the changing needs of students and society.

Conclusions

In Colombia, regulations have been established to promote inclusive education, but challenges are also identified in teacher training and school infrastructure. The key element for the success of inclusive education lies in the commitment of all actors, including teachers, school principals, higher education institutions and the government. The recognition of strengths and areas for improvement in schools and professionals is essential to optimize attention to student diversity and move towards a more inclusive and equitable education system.

Teachers have a fundamental role in the implementation of inclusive policies, as their understanding and proper application in the classroom are essential to create inclusive and respectful educational environments. Collaboration with pedagogical support entities is also crucial to address the individual needs of students with disabilities and ensure their access to quality education.

Teacher training in inclusive approaches and knowledge of assistive technologies are fundamental to support these students. Interprofessional collaboration is essential for a comprehensive and multidisciplinary approach in caring for students with special needs. In addition, the influence of parental attitudes and the need for structural changes in the educational system to achieve inclusive and equitable education are highlighted.

It is essential to consider government, institutional and family budgets as determining factors in the development of inclusive education. The appropriate allocation of financial resources can significantly influence the quality and scope of policies and practices in inclusive education.

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Inclusive education. Future studies should delve deeper into these aspects to identify opportunities and limitations in the implementation of effective inclusive education.

In addition, the emotional, social and physical aspects of regular students in inclusive settings are factors that significantly influence the work of teachers. It is essential to understand how these factors affect both students with special needs and their peers, and how they can influence classroom dynamics and overall well-being. Interpersonal relationships, emotional support, and social inclusion within the classroom are key elements that require further attention to ensure a truly inclusive learning environment.

Teachers play a crucial role in characterizing and typifying inclusive students, which involves understanding their individual educational needs and promoting active interaction between the student, the family and the school. To achieve this, teachers must adapt teaching to students' differences and cultivate empathetic relationships to ensure equal opportunities and the full development of each student. The integration of these multiple factors and perspectives is essential to move towards a more inclusive, equitable and effective education system.

Conflicts of interest

The article is free of any kind of conflict of interest.

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