



Inclusive Education in Times of Pandemic: Effects of COVID-19 on Students with Disabilities

Educación inclusiva en tiempos de pandemia: efectos de la COVID-19 en estudiantes con discapacidad

Edwards Jesús Aguirre Espinoza¹  

¹ Universidad Nacional de San Antonio Abad del Cusco. Cusco, Perú.

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Corresponding Author: Edwards Jesús Aguirre Espinoza 

ABSTRACT

The COVID-19 pandemic triggered an unprecedented global educational crisis, significantly disrupting learning continuity and exposing deep inequalities within education systems. This study, developed under a qualitative approach with a descriptive-analytical design, aimed to examine the impact of the pandemic on the education of students with disabilities in vulnerable contexts. Based on a systematic review of documentary sources, institutional reports, and prior research, the study identified the main barriers and educational responses implemented during school closures. The findings indicate that the suspension of face-to-face education and the rapid shift to remote learning intensified existing disparities, particularly due to limited access to technology, lack of adapted educational resources, and adverse socioeconomic conditions. Furthermore, many of the strategies adopted replicated traditional teaching models without adequately addressing student diversity, thereby restricting the participation of learners with disabilities and negatively affecting their overall well-being. The study also highlights the role of structural factors, such as poverty and insufficient teacher preparedness, in shaping the effectiveness of educational responses. In this context, it is concluded that the pandemic not only deepened educational inequalities but also revealed the urgent need to strengthen education systems through more inclusive, flexible, and resilient approaches. Ultimately, the crisis presents an opportunity to rethink educational models toward greater equity and to ensure the right to education under all circumstances.

Keywords: inclusive education; disability; COVID-19; educational inequality.

RESUMEN

La pandemia de COVID-19 generó una crisis educativa sin precedentes, afectando de manera significativa la continuidad del aprendizaje a nivel global y evidenciando profundas desigualdades en los sistemas educativos. El presente estudio, desarrollado desde un enfoque cualitativo y con un diseño descriptivo-analítico, tuvo como objetivo analizar el impacto de la pandemia en la educación de estudiantes con discapacidad en contextos de vulnerabilidad. A partir de la revisión sistemática de fuentes documentales, informes institucionales y estudios previos, se identificaron las principales barreras y respuestas educativas implementadas durante el cierre de instituciones. Los resultados muestran que la interrupción de la educación presencial y la transición a modalidades remotas profundizaron las brechas existentes, especialmente debido a limitaciones en el acceso a tecnologías, la falta de recursos educativos adaptados y las condiciones socioeconómicas desfavorables. Asimismo, se evidenció que muchas de las estrategias adoptadas replicaron modelos tradicionales sin considerar la diversidad del alumnado, lo que limitó la participación de estudiantes con discapacidad y afectó su bienestar integral. El estudio también destaca la influencia de factores estructurales, como la pobreza y la limitada preparación docente, en la efectividad de las respuestas educativas. En este contexto, se concluye que la pandemia no solo intensificó las desigualdades educativas, sino que también puso en evidencia la necesidad de fortalecer los sistemas educativos mediante enfoques inclusivos, flexibles y resilientes. Finalmente, se plantea que esta crisis representa una oportunidad para replantear los modelos educativos hacia una mayor equidad y garantizar el derecho a la educación en cualquier contexto.

Palabras clave: educación inclusiva; discapacidad; COVID-19; desigualdad educativa.

INTRODUCTION

The COVID-19 pandemic triggered an unprecedented global educational crisis, abruptly transforming the functioning of school systems and affecting millions of students. The widespread closure of educational centers, adopted as a measure to curb the spread of the virus, disrupted teaching and learning processes on a scale never before seen in peacetime, forcing governments, teachers, and families to quickly adapt to new educational modalities. However, the capacity to respond to this emergency was unequal, revealing profound differences between countries and regions according to their levels of development and resource availability (UNESCO, 2020; UNICEF, 2021; Singal, 2021).

In this scenario, pre-existing educational inequalities not only became more visible but also deepened, particularly affecting the most vulnerable groups. Among them, students with disabilities faced a higher risk of exclusion, especially those living in poverty. Difficulties in accessing technologies, the shortage of adapted educational materials, and the limited preparation of educational systems to address diversity in virtual environments contributed to widening the gaps in access and continuity of learning (Miles & Singal, 2009; Thomazet, 2009; Barton, 2008). Although alternatives such as radio, television, and various digital platforms were implemented, evidence suggests that these strategies failed to adequately address the specific needs of this group (UNICEF, 2020; McClain-Nhlapo et al., 2020).

On the other hand, the limited production of research focusing on the impact of health crises on the education of people with disabilities has hindered the development of effective responses. Experiences from previous emergencies were not sufficiently systematized from an inclusive perspective, which has impeded the construction of sustainable and equitable strategies. This lack of evidence has favored the persistence of educational approaches that do not fully incorporate student diversity in crisis contexts (Kamga, 2020).

In countries with high levels of socioeconomic vulnerability, especially in sub-Saharan Africa, the effects have been even more profound. Elements such as structural poverty, limitations in educational infrastructure, and insufficient teacher training have conditioned the implementation of inclusive measures during the pandemic. In this context, the reality of children with disabilities in rural areas highlights the convergence of multiple barriers that restrict their access to quality education and reinforce processes of educational exclusion (Mbazzi et al., 2021).

Within this framework, the purpose of this study is to analyze the implications of the pandemic on the education of students with disabilities, considering the dynamics of exclusion that arise in crisis contexts. Using an analytical approach, it seeks to contribute to the understanding of the structural challenges faced by educational systems, as well as to identify key elements for designing more inclusive and equitable responses to future contingencies (Ainscow, 2020; Pearce & McDermott, 2022).

METHODS

The study was conducted under a qualitative approach, with the purpose of analyzing and understanding the implications of the pandemic on the education of students with disabilities in vulnerable contexts. A descriptive-analytical design was chosen, which allowed for a comprehensive examination of educational experiences during the disruption of in-person classes, as well as the factors that influenced the continuity of learning processes.

The research was based on the analysis of information from documentary sources and available empirical evidence regarding the impact of the health crisis on educational systems characterized by structural limitations. In this regard, priority was given to reviewing academic studies, institutional reports, and other relevant documents related to inclusive education in emergency contexts, paying special attention to populations in situations of social and economic disadvantage.

The methodological development was organized into different stages. In a first phase, a systematic collection of information was carried out, selecting documents based on their thematic relevance, timeliness, and contribution to the research problem. Subsequently, a detailed content analysis was performed, which allowed for the identification of key aspects related to access to education, the pedagogical strategies implemented during the pandemic, and the main barriers faced by students with disabilities.

In a second stage, the collected information was classified into previously defined categories, such as access conditions, availability of educational resources, teaching practices, and socioeconomic factors. This organization facilitated the identification of recurring patterns and relationships among the different analyzed elements, promoting a deeper understanding of the studied phenomenon.

Finally, a critical interpretation of the results was carried out, integrating the findings into a coherent analytical framework. This process allowed for the establishment of links between the structural conditions of educational systems and the experiences lived by students during the pandemic, highlighting both the limitations and the opportunities for the development of inclusive educational practices in crisis contexts.

To ensure the quality of the study, criteria inherent to qualitative rigor were considered, such as internal consistency, systematicity in the analysis, and transparency in the selection and treatment of information. In this way, the adopted methodology allowed for addressing the object of study from a comprehensive perspective, contributing to the generation of relevant knowledge on inclusive education in emergency scenarios.

RESULTS

The findings of the study show that the pandemic had a considerable effect on the educational continuity of students with disabilities, particularly in environments marked by structural limitations and high levels of vulnerability. Based on the analysis developed, different categories were identified that allow for an understanding of both the main impacts and the educational responses implemented during the period of suspension of in-person classes.

Table 1. Conditions of access to education during the pandemic.

Dimension	Observed situation	Impact on learning
Technological access	Limited access to devices and the internet	Disruption of learning and difficulties in educational continuity
Educational resources	Shortage of teaching materials adapted to student needs	Decrease in inclusion and learning opportunities
Family environment	Unequal educational support depending on family conditions	Increase in academic performance gaps
Geographical location	Greater impact in rural areas due to infrastructure and access limitations	Inequality in educational opportunities

Note: Own elaboration.

Interpretation

It is observed that access conditions constitute one of the main barriers to educational continuity, showing significant inequalities between different contexts.

Variable

The implemented strategies allowed for some educational continuity, but their effectiveness was conditioned by factors such as technological access and the level of family support.

Table 2. Educational strategies implemented during school closures.

Strategy	Description	Effectiveness level
Virtual education	Use of digital platforms	Limited in vulnerable contexts
Traditional media	Educational radio and television	Moderate access
Printed material	Distributed guides and workbooks	Complementary support
Family accompaniment	Support from parents or caregivers	Variable

Note: Own elaboration

Table 3. Main barriers to inclusive education

Type of barrier	Description	Consequence
Pedagogical	Lack of curricular adaptation	Exclusion from the educational process
Technological	Limitations in connectivity and access to technological resources	Digital divide
Socioeconomic	Conditions of poverty and economic inequality	School dropout
Institutional	Lack of preparation within the educational system to address diversity	Insufficient response to inclusion needs

Note: Own elaboration.

Interpretation

The identified barriers show that educational exclusion during the pandemic does not respond to a single factor, but rather to the interaction of multiple structural conditions.

Interpretation

Students with disabilities experienced a multidimensional impact, affecting not only their learning, but also their emotional and social well-being.

Table 4. Impact on students with disabilities

Dimension	Identified effects	Level of impact
Academic	Learning lag	High
Social	Isolation and reduced interaction	High
Emotional	Stress and demotivation	Medium-high
Family	Caregiver overload	High

Note: Own elaboration

Synthesis of results

In general terms, the results indicate that the pandemic accentuated already existing educational inequalities, impacting students with disabilities in vulnerable contexts most severely. Access difficulties, the limited adaptation of pedagogical strategies, and the presence of structural barriers contributed to widening the gaps in the educational field. Similarly, it is observed that the measures adopted failed to fully ensure an inclusive education, which highlights the need to strengthen educational systems to more effectively face future crisis situations.

DISCUSSION

The results of the study show that the pandemic not only caused the disruption of educational processes, but also intensified already existing structural inequalities, affecting students with disabilities in a more marked way. In this context, the health crisis acted as an element that amplified educational gaps, highlighting the limitations of educational systems to offer inclusive responses in emergency situations.

One of the most relevant findings is the direct relationship between access conditions and the continuity of learning. Restrictions on access to technologies, combined with the shortage of adapted educational materials, significantly limited students' opportunities for participation, especially in rural and low-income contexts. This highlights that, although the strategies implemented during school closures were necessary, they were not sufficient to guarantee educational equity, due to their dependence on resources and infrastructure not available to the entire population.

Likewise, it is observed that many of the educational responses replicated traditional models, transferring in-person practices to virtual environments without adequately considering the diversity of the student body. This lack of pedagogical adaptation favored processes of exclusion, particularly for students with specific needs who require differentiated support to access learning. Consequently, distance education, instead of reducing inequalities, in multiple cases contributed to deepening them.

On the other hand, the socioeconomic dimension is configured as a key factor in the educational experience during the pandemic. Poverty conditions, the limited availability of resources in households, and additional family responsibilities directly affected the ability of students to continue their education. This scenario shows that educational inclusion cannot be addressed in isolation from the social context, but rather requires an integrated vision of the conditions in which learning takes place.

In the case of students with disabilities, a multidimensional impact was identified that transcends the academic, also encompassing social and emotional aspects. Isolation, reduced interaction, and the lack of specialized support affected their general well-being, which highlights the importance of addressing inclusion from an integrated perspective. Furthermore, the limited preparation of institutions to respond to these needs in crisis contexts highlights structural weaknesses in educational systems.

Finally, the results suggest that the development of inclusive educational systems requires moving toward more flexible, resilient, and diversity-centered approaches. This implies not only expanding access to technological resources but also strengthening pedagogical competencies, promoting curricular adaptation, and consolidating policies that respond to the realities of the most vulnerable contexts. In this regard, the experience derived from the pandemic represents an opportunity to rethink educational models and move toward more equitable and inclusive proposals.

In summary, the discussion shows that inclusive education in crisis contexts requires structural responses that transcend traditional approaches, integrating pedagogical, social, and institutional dimensions to guarantee the right to education for all students.

CONCLUSIONS

This study examined the impact of the pandemic on education from an inclusive perspective, showing that the actions implemented to ensure learning continuity did not respond equitably to the diversity of the student body. The suspension of in-person education exposed various structural weaknesses in educational systems, especially regarding support for students with disabilities and those in vulnerable contexts.

The results corroborate that the pandemic not only triggered an educational crisis but also intensified existing inequalities, widening gaps in access, participation, and learning. Factors such as technological limitations, the shortage of adapted materials, and adverse socioeconomic conditions created a scenario in which numerous students were excluded from educational opportunities, significantly affecting both their academic development and their overall well-being.

Similarly, the strategies adopted during the emergency, although necessary, were insufficient to guarantee fully inclusive education. The tendency to transfer traditional approaches to virtual environments highlighted the lack of pedagogical and institutional preparation to address crisis contexts from an equity perspective. Within this framework, educational inclusion must be integrated as a transversal component in planning and responding to emergency situations.

Furthermore, the study highlights the importance of adopting a systemic vision that integrates public policies, pedagogical practices, and social conditions to build more resilient educational systems. This involves strengthening teacher training, promoting curricular flexibility, and ensuring access to relevant educational resources for all students, especially those in highly vulnerable conditions.

In summary, the pandemic constitutes both a challenge and an opportunity to rethink educational models, orienting them toward principles of equity, inclusion, and social justice. Moving in this direction implies not only promoting structural transformations but also fostering a sustained commitment by educational actors to guarantee the right to education in any context.

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CONFLICT OF INTEREST

None.

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Drafting – original draft: Edwards Jesús Aguirre Espinoza.

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