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Co-Creation Strategies for Equitable Open Education: A Framework for Diversity and Inclusion

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ARTICLE

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ABSTRACT

Education must be inclusive for all. Higher education institutions are aware of their responsibility to provide alternatives to meet the challenges of equitable education. But the great diversity of possibilities creates an even greater challenge: how to include everyone? This article presents the development of the INSPIRA framework, a participatory model designed to guide co-creation strategies that foster inclusion and equity in open and digitally mediated educational environments. Grounded in the collective experience of educational communities, the framework proposes to use the collective experience of the educational community of institutions as a focus for the creation of context-specific strategies. To this end, we analyzed 20 co-creation strategies developed with specific communities that contribute to inclusion in the educational context. The study yielded findings that allow us to conclude that the INSPIRA framework may serve as a meaningful contribution to ongoing efforts in developing contextualized, relevant, and up-to-date inclusion strategies for institutions committed to embracing classroom diversity with dignity and purpose.

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1. INTRODUCTION

Equitable and quality education is a main commitment of institutions, governments and civil society as a whole. To reach access for everyone sets a number of challenges, mostly related with contextualization of the solutions and approaches, i.e. some strategies might offer disproportionate benefits for individuals from underrepresented groups (Theobald et al. 2020). Beyond being a pedagogical purpose, educational inclusion is a human right and aligns with Sustainable Development Goal (SDG) 4 'Quality Education' (United Nations 2015), but overall it has a massive impact in the development of individuals, communities and the global population. In addition, inequity in education causes other undesired effects, for instance, underrepresented groups cannot bring their visions to the collective learning, therefore unique approaches to global challenges are misheard or neglected (Hofstra et al. 2020). As a result, great attempts to address global challenges are led by a single group: those who can access quality education.

Among the challenges involved in granting equitable access to quality education, one of the most critical is the capacity of educators and institutions to adapt global models to local needs. Adaptation takes time, and educators don't have much to implement imported models that might not be what they need or in the range of their possibilities to adopt (Starck et al. 2020). As Starck et al. (2020) note, imported or standardized solutions often fail when they disregard contextual realities. This calls for participatory strategies that can be adapted by communities themselves, while also being supported by equity-oriented policies (Blasco, Brusca & Labrador 2021). In this context, the 2019 UNESCO Recommendation on Open Educational Resources (OER) emphasizes the need to build capacity and infrastructure for equitable digital access—opening new avenues for inclusion, but also revealing fresh barriers.

To address the above concerns, this paper proposes the INSPIRA framework, developed through the analysis of 20 co-creation experiences across higher education institutions. INSPIRA emphasizes the collective agency of educational communities to co-design inclusion strategies that are context-specific, culturally relevant, and technologically mediated. Rather than offering a universal recipe, the framework seeks to support institutions in creating responsive solutions—grounded in lived realities and supported by collaborative, open, and adaptive practices.

1.1. CO-CREATION AND PARTICIPATORY MODELS FOR INCLUSION

Co-creation is increasingly recognized as a core strategy for promoting inclusion in educational contexts, enabling diverse stakeholders to actively participate in designing solutions tailored to specific realities. particularly when it centers marginalized voices and distributes agency across stakeholders (Abegglen 2024; Bovill 2020). Unlike traditional top-down reforms, co-creation allows communities to build solutions with those affected, rather than for them—a distinction that has major implications for equity (Könings et al. 2020). Recent literature highlights how participatory models contribute to the contextualization of educational design, making them more adaptable and culturally responsive. For instance, Cubides, Chiappe and Ramirez-Montoya (2024) show that co-creating OER not only enhances access but builds critical 21st-century skills among participants. Ramírez-Montoya et al. (2023) further argue that emerging technologies, such as generative AI, expand the potential of co-creation by enabling dynamic, personalized, and scalable educational content—especially in diverse settings.

Furthermore, Wilkinson and Nagar (2025) affirm that integrative co-creation among institutions, students, and external organizations effectively prepares individuals for multicultural and dynamic environments. Thus, co-creation not only promotes educational equity but also enhances the global relevance and applicability of learning.

Finally, the effective implementation of co-creation processes requires clear structures to guide and facilitate meaningful participation. Research by Fuentes, Zelaya and Madsen (2021) indicates that designing inclusive policies and practices should actively involve students, educators, and external stakeholders from early stages to ensure effective and equitable adoption.

While various frameworks exist for participatory education—ranging from student-as-partner models to design-based research approaches—few explicitly bridge co-creation, inclusion, and digital openness. INSPIRA responds to this gap by synthesizing lessons from practice into

a structured yet flexible model that integrates transdisciplinarity, abductive reasoning, and ethical digital engagement (Torres-Sánchez, Juárez & Miranda 2024; Starck et al. 2020).

Where other models emphasize process or product, INSPIRA emphasizes position: who gets to shape inclusion strategies, and how their local knowledge and digital practices are valued.

1.2. CHALLENGES TO ADDRESS DIVERSITY IN THE EDUCATIONAL CONTEXT

Addressing diversity in educational contexts nowadays presents multifaceted challenges that require institutional commitment and strategic co-creation efforts. One of the key difficulties is classroom management, where teachers have to face complex disciplinary issues, communication barriers, and group dynamics that may hinder collaboration among students from diverse backgrounds (Moriña 2017). Language differences, for example, can create obstacles to effective learning and participation, making it necessary to implement inclusive communication strategies (Moriña 2017). Furthermore, pedagogical challenges such as differentiating instruction and fostering culturally responsive teaching further complicate educators' responsibilities (Sharma 2023). Assuring that learning materials, methodologies, and assessment are adaptable to varied learning styles and cultural contexts is a crucial step toward achieving equity in education (Sharma 2023).

But the present educational context goes beyond the classroom: social and institutional barriers also impact inclusivity in higher education. Prejudice, stereotypes, and implicit biases can create a negative environment, limiting student engagement and academic success (Sharma 2023). Moreover, the underrepresentation of diverse cultural perspectives in curricula can marginalize certain groups, reinforcing the existing systemic inequities. Resource disparities, especially regarding access to digital technology and academic support, make achievement gaps larger, particularly affecting students from historically underprivileged communities (Parkhouse, Lu & Massaro 2019). Addressing these structural barriers requires an institutional commitment to equity-focused policies, professional development for educators, and the integration of diverse voices in decision-making processes to ensure that all students have the opportunity to thrive (Cherng & Davis 2019; Hale 2023).

For educators themselves, the challenges of diversity go beyond instructional methods to personal and professional experiences. Teachers must engage in self-reflection to identify and mitigate their own biases while also advocating for inclusive environments (Sharma 2023). Faculty from underrepresented backgrounds often face isolation, discrimination, and lower job satisfaction, highlighting the need for supportive networks and mentorship programs (Handelsman & Fine 2014). For instance, in predominantly monocultural institutions, faculty of color frequently experience exclusion and racism, further complicating their professional development and career advancement. Developing a framework for inclusion through co-creation strategies can help institutions foster equitable educational spaces (Abegglen 2024). By involving faculty, students, and stakeholders in designing inclusive policies and practices, higher education can move toward a more diverse and equitable learning environment that benefits all members of the academic community (Fuentes, Zelaya & Madsen 2021).

These findings reflect the need to move beyond addressing diversity as a set of isolated challenges and toward understanding it as a systemic, multidimensional issue. Diversity in education is not simply about recognizing difference—it raises broader questions of power, representation, and structural access. As Cherng and Davis (2019) argue, genuine inclusion requires institutional shifts in pedagogy, governance, and curriculum, not merely token representation. Moreover, applying an intersectional lens reveals how multiple identities—such as race, language, gender, and socioeconomic background—interact to shape learners' opportunities and barriers (Hale 2023). From this perspective, the INSPIRA framework does not treat diversity as a background condition, but as a driving force that informs each stage of co-creation, across a scaffolded framework that promotes distributed leadership and localized adaptation, rooted in lived experience.

1.3. OPEN EDUCATION AND COLLABORATIVE APPROACH

Open education is an effective strategy to reach quality and equitable education. The Dubai Declaration (UNESCO 2024) calls for the creation and development of OER within five strategic lines of action, i.e., Capacity building, Policy, Ensuring inclusive and equitable access to quality

OER, Sustainability models for OER, and International cooperation. This being a complex and immense task for one sole institution, the declaration urges institutions, organizations, and governments to align their wills and capacities to release their potential by offering open courses, resources and certifications, as "OER are a cornerstone for equitable and inclusive access to knowledge in the digital age" (2024: 12). Although the challenge seems overwhelming, and institutions can demonstrate different capacities and infrastructure to embrace such endeavor, we are involved in a constantly connected world that allows us to summon forces to thrive in this commitment as a network.

In order to achieve this, many types of efforts and paths must be combined. Collaborative approaches to building educational strategies have proven to be effective in promoting equity and diversity because of their inclusive nature. After several studies (Compagnucci & Spigarelli 2020; de Carvalho-Filho, Tio & Steinert 2019) and practical cases development (Bovill 2020; Könings et al. 2020), we have learned that the more participants are included in the process of finding a solution to a complex problem, the closer the solution can be extrapolated to different contexts. For instance, Wilkinson and Nagar (2025) state that work-integrated learning, as a practice-based education approach, (2025: 2) can have a positive impact on students' readiness to embrace and thrive "in multicultural, dynamic business environments". Furthermore, the authors also highlight the relevance of the collaborative co-creation of educational institutions, students, and placement organizations.

In this sense, open education, combined with an approximation to the current forms of interaction, the demands of the working environment, and the available new technologies, offers a unique opportunity. Technologies such as generative AI now offer new tools for this collaboration, making personalization and multilingual adaptation more feasible (Ramírez-Montoya et al. 2023). Yet without ethical frameworks and inclusive co-design, these tools risk reproducing bias at scale. Moreover, collaborative practices among educators in the iterative design, use, and reuse of OER, are transforming current practices of teaching training and learning strategies, thus favoring the development of 21st-century skills and shared knowledge co-construction (Cubides, Chiappe & Ramirez-Montoya 2024).

Taken together, the dimensions of co-creation, diversity, and open education form an interdependent triad that underpins the INSPIRA framework. Co-creation serves as the participatory mechanism through which educational actors collaboratively address contextual needs. Diversity represents both the challenge and the value driver of inclusive design, requiring strategies that accommodate varied identities, abilities, and experiences. Open education, meanwhile, provides the enabling infrastructure—through OER, digital platforms, and generative AI—that allows these participatory processes to scale and adapt.

While existing models such as Universal Design for Learning (UDL) and inclusive governance frameworks offer valuable contributions to inclusion, they often approach the challenge from isolated dimensions. UDL, for instance, provides a pedagogical guide for designing flexible and accessible learning experiences (CAST 2018), while the inclusive governance approach emphasizes institutional representation and stakeholder involvement in policy decisions (OECD 2020). INSPIRA builds on these foundations but distinguishes itself by weaving the three dimensions from the ground up, prioritizing co-created strategies that are both representative and actively constructed by those affected.

Thus, INSPIRA responds by proposing a structured yet adaptable model that connects open education principles with co-creation practices and digital mediation. It seeks to empower institutions not just to adopt open resources, but to engage in open processes—where learners, educators, and communities co-create contextually meaningful, technologically enabled solutions.

2. METHOD

This study offers a framework conceived as a guide for decision-makers, educators, and community leaders by aligning educational innovation with principles of equity and collective agency. Academic literature positions frameworks as a relevant key for structuring empirical inquiry and theoretical development in environmental social science, governance (Malodia et al. 2021) research and practice (Partelow 2023). For the INSPIRA framework, we conducted a review and analysis of 32 papers retrieved from one database: Scopus. This document presents

an illustrative review rather than a comprehensive systematic literature review to establish the state of the art. Instead, we decided to focus on a qualitative approach to identify patterns, categories and relevant insights to build the proposed framework. The inclusion criteria are deliberately designed to prioritize sources that are openly accessible and verifiable, thereby enhancing transparency and enabling replicability for future studies or framework adaptations. Additionally, using a single database reduces the time for consolidation and duplicity elimination, as minimizing unnecessary tasks can minimize the risk of human errors (Manyike, Taruvinga & Akinyemi 2025). Thus, Scopus was selected as the central database for this review, and the keywords used for the documents retrieved were: (co-creation) OR (participative) AND (diversity) AND (education), all Open Access articles published in Journals between 2020 and 2024. The literature search applied the following search string to identify relevant peer-reviewed journal articles:

> TITLE-ABS-KEY((co-creation) OR (participative) AND (diversity) AND (education)) AND (LIMIT-TO (OA,"all")) AND (LIMIT-TO (DOCTYPE,"ar")) AND (LIMIT-TO (PUBSTAGE,"final")) AND (LIMIT-TO (SRCTYPE,"j")) AND (LIMIT-TO (LANGUAGE,"English") OR LIMIT-TO (LANGUAGE,"Spanish")).

This search was designed to retrieve final-stage open access journal articles in English or Spanish that explicitly reference terms related to co-creation or participative approaches, diversity, and education, within the article title, abstract, or keywords. Filters were applied to ensure the inclusion of only fully published articles (article type: "ar"), indexed in scientific journals, and available in either of the two target languages. For the screening, we followed the PRISMA method (Page et al. 2021; Moher et al. 2009), a trusted methodology for conducting and reporting systematic reviews and mappings. Even though this study does not present an exhaustive review; its intention is (a) to collect effective practices and intentions of participatory process to promote inclusion or equity among diverse educational contexts, and (b) to identify the stakeholders' roles in the processes, rather than identifying the state of the art in this field. Figure 1 shows the PRISMA process to select the reviewed studies. The documents screened for the study allowed us to observe useful information regarding the participatory process and to extract meaningful insights that can inform future design and implementation strategies. Notably, 12 documents were excluded during the screening phase, as they did not provide relevant data on participatory methodologies or stakeholder engagement. This selective inclusion ensures that the final corpus consists exclusively of sources offering substantive information on both the participatory processes and the roles of the actors involved. From those documents we have extracted relevant keys to construct a framework for participatory processes leading to strategies for inclusion and equity in the educational context.

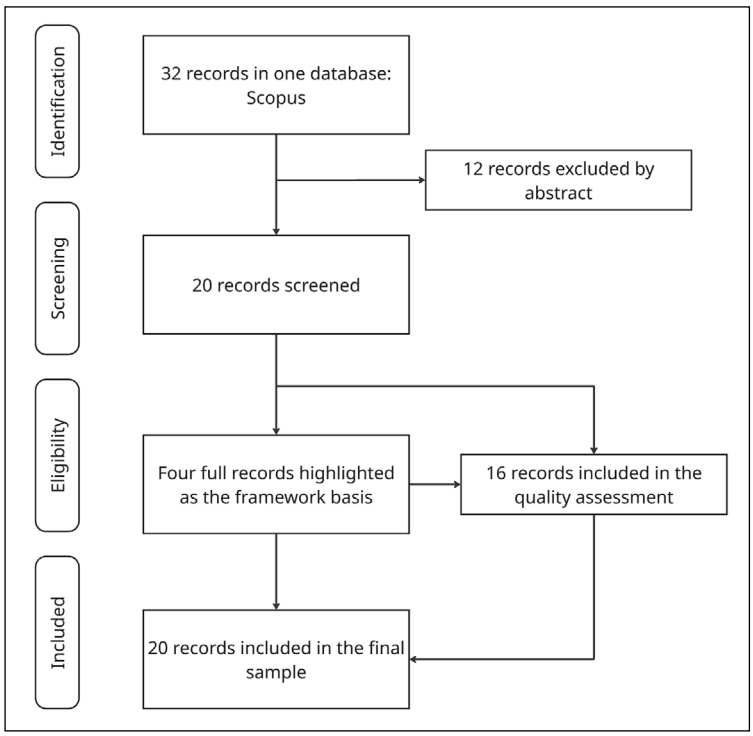


Figure 1 PRISMA diagram of included studies of participatory processes for inclusion in the educational context. Authors' own elaboration.

2.1 QUALITY ASSESSMENT

For the quality assessment, the retrieved documents were screened first by the abstract, looking for cues of participatory processes, with specific mention of the participants, the methodology and focus on the process. From this first survey, 12 documents were excluded as they did not offer insightful information regarding our purpose. The second stage of the revision was made by reading the complete documents in the search for answers to three important questions for the framework configuration: (1) How the participatory process allowed the goal of the reported study to be reached; (2) who were the participants and what was their role?; and (3) which actions were taken before, during and after conducting the participatory process? This revision allowed us to extract highlights in terms of the emergent categories that are discussed further in this section, regarding the Grounded Theory approach. An important finding was that of the 20 documents, four related closely to the INSPIRA Project, so these documents were taken as a reference, and our analysis of them is presented in the Results section. Table 1 presents the synthesis of the inclusion and exclusion procedure during the screening.

Table 1 Screen documents, inclusion/exclusion criteria.

ID	AUTHORS	ABSTRACT	SCREENING RESULT
1	Horgan D.; Martin S.; O'Riordan J.; Maier R. (2021)	Cases with similarities to the INSPIRA Project	Included and reviewed in detail to form the framework
2	Lakkala S.; Beaton M.C.; Kokko K. (2024)		
3	MacMath S.; Salingré B.; Sivia A. (2023)		
4	Partington A. (2020)		
5	Ali Y.; Caballero G.E.; Shatnawi E.; Dadich A.; [...] (2023)	Describing the participatory process	Included for categorization
6	Becker A. (2022)		
7	Caretta M.A.; Pepa M. (2023)		
8	Claes E.; Schrooten M.; McLaughlin H.; Csoba J. (2024)		
9	Elder S.; Wittman H.; Giang A. (2023)		
10	Haga T.S.; Ravn J.E.; Alias O.I.; Greenwood D.J. (2024)		
11	Kalbarczyk A.; Perkins S.; Robinson S.N.; Ahmed M.K. (2023)		
12	Lees D.; Djordjevic A. (2024)		
13	López-López M.J.; Navarro-Abal Y.; Climent-Rodríguez J.A.; Gómez-Salgado J. (2020)		
14	Ravneberg B.E. (2024)		
15	Segundo C.L.-S.; Frutos-Esteban F.J. (2023)		
16	Sonneveld L.; Klapwijk R.M.; Stappers P.J. (2024)		
17	Sy M.P.; Pineda R.C.; Cabatan M.C.D.C.; Ching P.E.; [...] (2023)		
18	Trull-Oliva C.; Molina L.C.; Vizarreta P.V.; Rodrigo-Moriche M.P. (2022)		
19	Webb J.; Arthur R.; McFarlane-Edmond P.; Burns T.; Warren D. (2021)		
20	Wittich W.; Kröger E.; Aubin G.; Fadhlaoui A.; Anderson N.D.; [...] (2021)		
21	Bajo Marcos E.; Ordóñez-Carabaño Á.; Rodríguez-Ventosa Herrera E.; [...] (2023)	Not describing the participatory process	Not included
22	Cornwell R.M.; Ross K.; Gibeily C.; Guthrie I.; [...] (2024)		
23	De Luca C.; Langemeyer J.; Vaño S.; Baró F.; Andersson E. (2021)		
24	Enstroem R.; Schmaltz R. (2024)		
25	Foster R.; Turkki N. (2021)		
26	Louca C.; Fine P.; Tonni I.; Leung A. (2024)		
27	Matthews R.; Rasheed Q.H.; Palmero Fernández M.; Fobbe S.; [...] (2019)		
28	Mukanga B.; Dlamini S.B.; Taylor M. (2024)		
29	Oyebode O.; Fowles J.; Steeves D.; Orji R. (2022)		
30	Rodegher S.L.; McGowen L.C.; Hughes M.D.; Schaible S.E.; Muniz A.J.; [...] (2024)		
31	Sobral C.; Caetano A.P. (2022)		
32	Valle-Ramírez A.; Sáez-Gallego N.M.; Abellán J. (2022)		

After the quality assessment, focusing on co-creation or participatory practices that promote inclusion and access to effective strategies addressing inclusive learning, 20 documents remained with four of them holding information much closer to our objective: setting the guidelines for conducting a participatory process to collect effective strategies from the academic community members, namely: students, educators, librarians, administrators, parents, counselors, and mentors. Different perspectives and experiences were gathered from the studies across various disciplines and contexts. The data obtained in a qualitative analysis were extracted by identifying patterns and themes in the data to generate categories. An inductive approach was used to analyze the studies' content from the abstracts and then the full text, in which the themes emerged from the data rather than being predetermined by the researcher (Chan 2023), which is consistent with the Grounded Theory (GT) approach.

The purpose of applying an inductive process through the GT method (Turner & Astin 2021), allowing the research to evolve as we understand what is important through the data collection and analysis, lies in the intention of developing theory through the INSPIRA Framework rather than testing it at this stage of the process. As we are not aiming for a "final solution for inclusion in the educational context" we acknowledge that each context might need to adapt the framework to their own conditions. Taking an inductive approach allows us to find some keys in the reviewed studies (Bingham & Witkowsky 2021), but at the same time, evolving with the framework applications to different and diverse scenarios with relevant actors. In a sense, the four studies identified as a direct antecedent to the participatory process we are aiming to conduct, shed light on the phases, focus and categories that should be included in the analysis and framework construction. The following section presents the findings from each study along with a general revision of the actions, elements, and activities that a co-creation process for inclusion strategies must include in the educational context.

3. RESULTS

A total of 20 studies addressing co-creation and participatory processes to improve learning and promote inclusion were analyzed following a rigorous quality assessment. After this, four documents were considered particularly relevant to our objective: setting a framework to conduct a participatory process involving diverse members of the academic community for the creation and identification of effective practices towards addressing diversity in learning environments. The following subsections present the findings from an in-depth analysis of each of these four key studies, followed by a synthesis of the core actions, elements, and activities identified as essential to a co-creation process for inclusive education.

3.1. CATEGORIES FROM THE REVIEWED STUDIES

The qualitative analysis showed that participatory practices often involve a set of elements that offer effective results from involving the academic community in co-creation spaces. The most cited element in the reviewed studies was the possibility of understanding the role of each group in the context of what was pursued by the intervention. It could be that the participant would play a small part or be the main character, the studies revealed that being aware of the role each part plays helps to define and clarify the intervention strategy. Another relevant element that emerged in the assessment is that of promoting the opportunity for open dialogue, highlighting the importance of fostering communication and clarity among all participants in the process. Concrete actions—practical steps taken to implement inclusive strategies—appeared frequently, often in combination with role understanding and collaborative engagement.

Additionally, the reviewed studies showed that defining concrete actions as the result of the process was valued among participants, giving the process a sense of purpose and value. In this sense, exploring and analyzing the barriers for the intervention, along with collaborative research, sometimes involving reaching out for key informers—individuals with deep knowledge of the local or institutional context—, was beneficial for achieving the collective goal. An interesting finding, although not addressed in many of the reviewed studies, was the strategy of a co-created curriculum. This strategy, although a concrete action, has a long-term impact and appears to be powerful to ensure that the implementation reaches a longer time, a larger space and a bigger part of the community. Figure 2 shows the number of appearances

of the found categories from the reviewed studies; taken together, these elements suggest that inclusive and participatory educational practices require an intentional blend of dialogue, collaboration, contextual analysis, and actionable steps, grounded in mutual understanding and shared purpose.

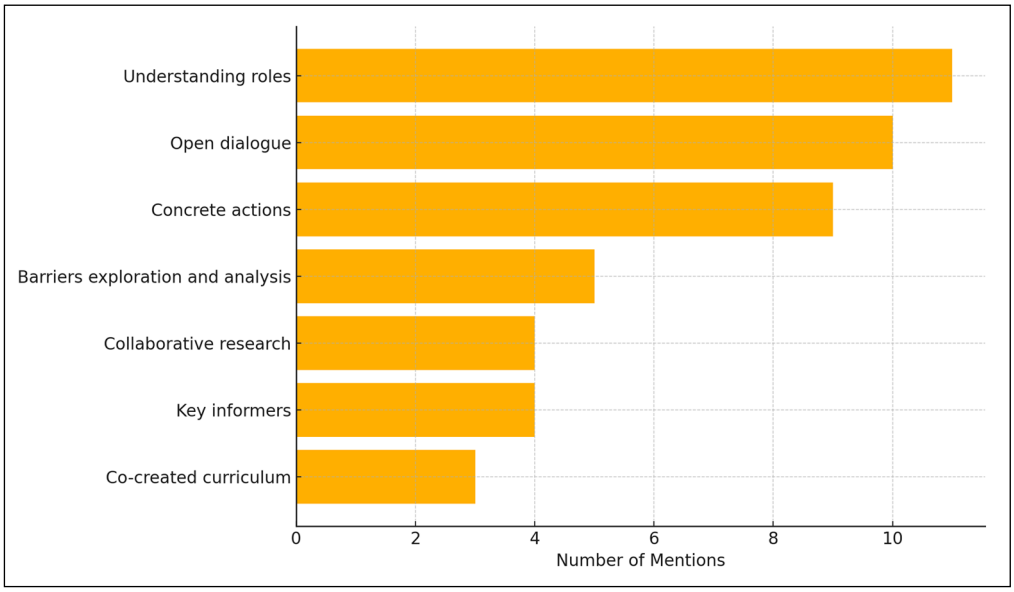


Figure 2 Frequency of key elements in participatory process from the reviewed studies.

3.2. ANALYSIS OF THE FOUR CORE STUDIES

Following the inductive methodology and Grounded Theory approach outlined in the Methods section, this analysis focused exclusively on four studies from an initial corpus of twenty. These four were identified as most closely aligned with the objective of developing inclusive, participatory strategies in education. Together, they offer rich insights into co-creation processes, stakeholder engagement, and the contextualized implementation of equity-driven practices. Their findings directly informed the conceptual and practical design of the INSPIRA framework.

The thematic categories identified across the broader set of 20 studies are strongly consistent with the findings from the four core studies selected for deeper analysis. Thus, the inductively derived categories from the full corpus served to validate and enrich the focused examination of the four selected studies, giving the framework development both breadth and depth, grounding it in diverse yet coherent research. Table 2 presents a preliminary thematic coding of the four core studies, highlighting key areas of convergence that serve as a foundation for the subsequent stages of analysis.

STUDY	THEMATIC CODING
Lakkala, Beaton & Kokko (2024)	Open Dialogue (method for surfacing meaning)
	Concrete Actions (collaborative strategies)
	Reframing Roles (professional transformation as a condition for inclusion)
Horgan et al. (2021)	Open Dialogue (multi-level stakeholder workshops)
	Key Informers (child and parent perspectives)
	Barriers Exploration (linguistic and institutional exclusions)
Partington (2020)	Open Dialogue (student-tutor relational models)
	Understanding Roles (transformation of academic staff and student identities)
	Concrete Actions (Student Experience Framework and tutoring scheme)
MacMath, Salingré & Sivia (2023)	Open Dialogue (faculty reflection and committee decision-making)
	Concrete Actions (implementation of EDID-aligned admissions changes)
	Collaborative Research (PAR methodology with institutional stakeholders)

Table 2 Thematic coding of the four core studies and their contributions to inclusive co-creation.

Note: EDID = Equity, Diversity, Inclusion, and Decolonization.

3.2.1. Lakkala, Beaton & Kokko (2024): A conceptual analysis of inclusive education in terms of participation and agency

Lakkala and colleagues (2024) conducted a conceptual analysis exploring how participation and agency are defined and promoted within inclusive education. Employing a multi-phase abductive process, encompassing a comprehensive literature review, dialogic reflection, and analytical synthesis, the study identified five interrelated thematic areas. First, it underscored the need to recognize the societal barriers that persist within school environments, often hindering full participation. Second, it emphasized the importance of appreciating student diversity and fostering cultural competence as essential components of inclusive practice. Third, the analysis highlighted the role of community engagement and collaboration with a range of stakeholders in shaping inclusive educational strategies. Fourth, it outlined various strategies for promoting meaningful student engagement within pedagogical processes. Finally, the study proposed approaches aimed at enabling learning for all students, with attention to their academic, emotional, and collective needs.

A key insight of the study is that inclusion must extend beyond structural change to encompass a renewal of professional agency among educators. The authors emphasize that inclusion often remains constrained by implicit institutional dynamics, and that professionals must first transform their own roles to meaningfully empower student participation and future-oriented learning.

Co-creation strategies relevant to the INSPIRA framework

While conceptual, this study provides foundational language and theoretical grounding for participatory strategies, mainly via:

- highlighting the critical role of dialogue in shaping inclusive educational meanings and interventions;
- underscoring that collaboration with stakeholders must be central to educational transformation;
- its concrete actions, though not deeply operationalized, directed to a layered understanding of inclusion that integrates policy, practice, identity, and community.

3.2.2. Horgan et al. (2021): Supporting languages: The socio-educational integration of migrant and refugee children and young people

This study explores the socio-educational integration of refugee and migrant children in Ireland through the lens of the IMMERSE project, which uses participatory and co-creation methodologies. It examines how children's experiences and perceptions, especially around language and belonging, can inform integration strategies, with a focus on developing key indicators for measuring inclusive practices across educational systems.

The study employed a multilayered participatory design, engaging stakeholders across micro, meso, and macro levels. At the micro level, five workshops were conducted with 35 children between the ages of 6 and 18—including both boys and girls, as well as a group of unaccompanied minors—and 25 migrant parents. The meso level involved two workshops with 14 professionals working in educational institutions and migrant-support organizations. At the macro level, the researchers carried out nine semi-structured interviews with key decision-makers from the education sector, non-governmental organizations, and community-based institutions. With each workshop focusing on a specific stakeholder group, this comprehensive approach enabled a rich understanding of the socio-educational integration experiences of migrant children, revealing systemic gaps and culturally sensitive needs via a multi-perspectival dialogue.

Key findings

Across all participant groups, language support emerged as a central theme in the study. Both children and parents consistently emphasized the critical role of learning the host language, English, in facilitating academic achievement and fostering social integration. However, many participants expressed frustration with the limited availability of information regarding language support services, particularly during the initial period following their arrival in the host country. Additionally, there was a widely shared perception that educational institutions placed

insufficient value on heritage languages, a stance that participants believed undermined the cultural identity and sense of belonging of migrant children.

Children also emphasized the emotional and social dimensions of language learning, particularly how language proficiency affects friendship formation and confidence in school environments. Thus revealing how co-creative engagement with diverse stakeholders can uncover not only functional barriers (e.g., inadequate support systems), but also cultural blind spots in integration policies—such as the undervaluation of linguistic diversity.

Co-creation strategies relevant to the INSPIRA framework

The study shows the value of participatory methods in identifying not just logistical gaps but cultural blind spots, particularly in relation to language, identity, and integration. In particular, this study contributes practical and conceptual elements to the INSPIRA framework:

- it shows the value of structured participatory processes with multiple stakeholder levels;
- it identifies the school as a key site of integration where language, identity, and belonging intersect;
- it proposes that successful inclusion depends not just on policy inputs but on active listening to those most affected—particularly children as key informants.

3.2.3. Partington (2020): Personalized learning for the student-consumer

This study explores the development of personal tutoring as a pivotal element of learner-centric pedagogy in response to the increasingly diverse social and cultural profiles of students in UK higher education. It positions co-creation as a tool for recognizing and utilizing the varied competencies, literacies, and motivations that students bring to their studies, challenging prevailing norms embedded in the hidden curriculum and traditional notions of student engagement.

Although not empirical in the conventional sense, this study employs a critical and theoretical lens to examine contemporary dynamics in higher education. It interrogates the impact of marketization within the UK higher education system, challenging dominant paradigms of student engagement. In particular, the study critiques the limiting binary of 'student as partner' versus 'student as consumer,' proposing instead a more nuanced model that recognizes the multiplicity of student identities and experiences. Central to this reimagined approach is the role of personal tutoring, which is positioned as both a relational and strategic practice capable of personalizing learning, fostering inclusion, and addressing persistent attainment gaps. The author introduces a Student Experience Framework, designed to recognize individual student identities and support inclusive pedagogical design across a spectrum of learning styles, modes of interaction, and motivations.

Key insights and contributions

A central finding of the study is the role of personal tutoring in fostering student reflexivity. The author contends that personalized tutoring can enable students to shape their own norms, values, and aspirations, positioning them as active co-authors of their educational journeys. The paper further challenges uniform models of student engagement by advocating for a pluralized understanding of diversity. Rather than treating students as a homogenous group, it calls for the cultivation of institutional cultures that recognize and accommodate a wide range of student experiences. In this context, tutors are portrayed as transformative figures whose capacity to understand, support, and respond to students' varied learning styles, motivations, and professional goals is essential to the development of genuinely inclusive educational environments.

Co-creation strategies relevant to the INSPIRA framework

This article contributes a crucial institutional perspective to co-creation:

- it locates co-creation within existing systems (tutoring, curriculum design) and pushes for their transformation;
- it underscores the importance of recognizing power asymmetries and the potential of co-creation to redistribute agency among students and educators;

- it conceptualizes inclusion as adaptive institutional design, not just support for individual needs.

3.2.4. MacMath, Salingré & Sivia (2023): Moving from EDID words to policy action: A case study of a teacher education program's admissions policy reform

This study examines how a Teacher Education Program (TEP) in British Columbia engaged in a three-year Participatory Action Research (PAR) initiative to move beyond performative commitments to Equity, Diversity, Inclusion, and Decolonization (EDID) by enacting concrete, systemic changes to their admissions policies and practices.

Using the "equity in" and "equity through" admissions framework, the authors applied PAR to identify systemic barriers and iteratively redesign their processes, identifying a disconnect between public EDID commitments and actual institutional practices, particularly in admissions processes.

Innovative practices and findings

In this study, the Multiple Mini Interview (MMI) was restructured to assess applicants' abilities to engage thoughtfully with anti-racist and inclusive principles. The findings demonstrated that the revised MMI format was effective in revealing applicants' values and dispositions aligned with the goals of equity, diversity, inclusion, and decolonization (EDID). The study also identified a pressing need to move beyond the use of generalized equity language in admissions criteria, advocating instead for the incorporation of measures that explicitly support anti-racist outcomes. Ongoing critical reflections by faculty members further contributed to incremental yet meaningful adjustments to admissions practices, aimed at enhancing access and representation for equity-seeking groups.

Co-creation strategies relevant to the INSPIRA framework

This study exemplifies co-creation at the institutional and procedural level:

- it uses collaborative reflection and data to restructure power-sensitive gatekeeping mechanisms;
- the work is grounded in shared institutional responsibility, with educators both leading and learning from the process;
- it offers a replicable model of how policies can be co-designed with awareness of identity, ethics, and access.

Collectively, these studies illustrate that co-creation is most impactful when it involves multi-stakeholder dialogue, critical reflection on institutional roles, and the translation of inclusive values into operational practices. Their contributions underpin the development of INSPIRA as a framework designed not to prescribe universal solutions, but to guide participatory transformation grounded in specific educational realities. See Table 3 for a summary of the core studies.

Table 3 Summary of the four core studies and their relevance to the INSPIRA framework.

Note: EDID = Equity, Diversity, Inclusion, and Decolonization.

STUDY	FOCUS	METHODOLOGY	STAKEHOLDERS INVOLVED	KEY CONTRIBUTIONS	RELEVANCE TO INSPIRA
Lakkala, Beaton & Kokko (2024)	Conceptual analysis of participation and agency in inclusive education	Conceptual analysis with abductive logic and dialogic workshops	Educators and researchers	Framing inclusion as requiring professional agency renewal; identification of hidden systemic barriers	Provides a foundational vocabulary and multi-dimensional lens on inclusion
Horgan et al. (2021)	Socio-educational integration of migrant children using participatory design	Multi-level participatory workshops and stakeholder interviews	Children, parents, educators, NGO/community stakeholders	Highlighting the centrality of language and belonging; surfacing overlooked cultural needs	Shows structured stakeholder inclusion and contextual adaptation

(Contd.)

STUDY	FOCUS	METHODOLOGY	STAKEHOLDERS INVOLVED	KEY CONTRIBUTIONS	RELEVANCE TO INSPIRA
Partington (2020)	Personal tutoring and learner engagement in a marketized higher education system	Theoretical reflection and institutional critique with framework design	Tutors, students, institutional designers	Challenging consumerist student models; supporting student reflexivity through personalized frameworks	Locates co-creation within institutional mechanisms and learner identity formation
MacMath, Salingré & Sivia (2023)	Reforming teacher education program admissions through participatory action research	Participatory Action Research with mixed-methods data and iterative cycles	Admissions committee, applicants, faculty	Translating EDID commitments into action; redesigning admissions with equity-focused tools	Models policy-level co-creation and collaborative transformation of access structures

3.3. INSPIRA FRAMEWORK FOR INCLUSION AND EQUITY IN HIGHER EDUCATION

Across the four selected studies, a consistent set of themes emerged that significantly informed the conceptual grounding and practical design of the INSPIRA framework. Despite differing in methodological approaches and educational contexts, the studies converge around four central contributions: (1) the value of dialogic processes, (2) the redistribution and reframing of roles among stakeholders, (3) the implementation of actionable, system-aware strategies for inclusion, and (4) the engagement of key informants to broaden perspective.

Open Dialogue featured prominently in all cases as both a methodological and relational mechanism. Whether through conceptual workshops (Lakkala, Beaton & Kokko, 2024), multi-level participatory sessions (Horgan et al. 2021), reflective tutoring practices (Partington, 2020), or collaborative admissions reform (MacMath, Salingré & Sivia, 2023), dialogic engagement was shown to be a cornerstone of co-creation that brings hidden dynamics and needs to the surface.

Understanding and Reframing Roles emerged as a second shared theme. Each study highlighted the importance of shifting traditional power structures in education: educators are not just implementers, but co-learners and facilitators; students are not just recipients, but informants and co-authors of their learning experience. This repositioning is central to promoting authentic participation and equity, as evidenced in both personal tutoring strategies (Partington, 2020) and faculty-led admissions reform (MacMath, Salingré & Sivia, 2023).

Concrete and Context-Sensitive Actions were the third point of convergence. All four studies moved beyond theoretical reflection to propose or implement actionable strategies: from revising interview protocols (MacMath, Salingré & Sivia, 2023) and institutional tutoring schemes (Partington, 2020), to proposing new participatory frameworks (Lakkala, Beaton & Kokko, 2024) and language integration indicators (Horgan et al. 2021). These interventions were deeply informed by the lived experiences of students and faculty, confirming the need for localized, co-constructed pathways to inclusion.

Finally, despite not being a recurrently mentioned element, this research team considers that the involvement of key informants in the processes of participatory creation of change strategies, in the context of higher education, is fundamental. If different voices and visions are integrated into the process there is likely to be less resistance, and the integrative purpose of this mission will be fulfilled from the outset (see Figure 3).

These reviewed strategies—open dialogue, role reframing, concrete co-created actions, and participatory policy design—directly informed the core components of the INSPIRA framework. By explicitly linking these practices to INSPIRA, the framework ensures that its design is grounded in both theory and lived participatory experiences, offering a dynamic guide for inclusive educational transformation.

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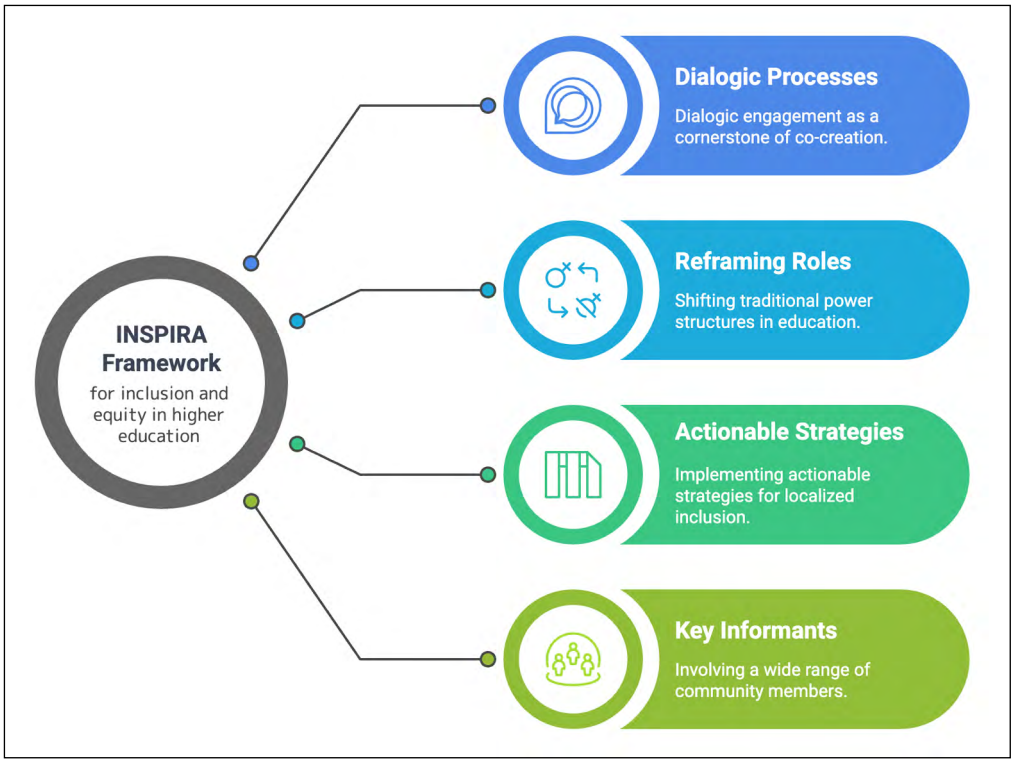


Figure 3 INSPIRA framework key components for participative inclusion strategies creation. Created with napkin.ai.

4. DISCUSSION

This study proposes the INSPIRA framework for inclusion and equity in higher education, grounded in the collective experiences of educational communities. By analyzing 20 co-creation experiences with diverse stakeholder groups, the framework offers a context-sensitive approach that moves beyond one-size-fits-all models. Rather than presenting a comprehensive state-of-the-art review, the study aimed to (a) identify effective participatory practices that foster equity and inclusion, and (b) map the roles of stakeholders involved in such processes. INSPIRA contributes to the growing field of inclusive education by positioning co-creation as a dynamic strategy that recognizes the unique needs, values, and capacities of specific communities.

In particular, the analysis of co-creation practices across diverse educational contexts reveals that inclusive strategies are most effective when anchored in dialogic and participatory approaches. Rather than implementing top-down policies, the INSPIRA framework demonstrates that equity emerges through sustained engagement with community voices and local needs (see Table 1). This finding aligns with Bovill (2020) and Abegglen (2024), who emphasize the importance of student–educator partnerships in co-creating meaningful educational experiences. The emphasis on dialogue not only fosters agency and trust but also surfaces hidden institutional dynamics, underscoring the need to reframe inclusion as an ongoing collective process rather than a fixed outcome. For practice, this suggests that institutions should prioritize inclusive dialogue as a method of designing, evaluating, and adapting policies and practices.

Secondly, the reframing of traditional roles within the educational ecosystem stands out as a critical enabler of equity. As it emerges from the reviewed studies, learners, educators, and institutions often navigate predefined positions that limit authentic participation. The INSPIRA framework captures the shift from static roles to flexible, co-constructed identities where students act as informants and educators as facilitators and co-learners. This perspective echoes Partington's (2020) call for rethinking learner identities and supports the broader theoretical turn towards relational and personalized learning frameworks. Institutional practices, such as personal tutoring or co-designed curricula, become mechanisms to improve engagement and for power reallocation. This shift has clear implications for teacher training programs, which must equip educators with transdisciplinary and abductive thinking skills (Torres-Sánchez, Juárez & Miranda 2024).

A third major insight concerns the contextualization of inclusive actions. Co-creation proves effective when it translates inclusive values into tailored practices that respond to specific barriers and opportunities within a given setting. The selected studies showed concrete

actions, such as the redesign of admissions interviews (MacMath, Salingré & Sivia 2023) or the development of integration workshops for migrant children (Horgan et al. 2021), that moved beyond symbolic commitments to actual structural transformation. These examples highlight that diversity, when addressed meaningfully, requires institutions to critically engage with the power dynamics and systemic exclusions embedded in their own practices, rather than treating difference as a surface-level variable. This reinforces the position of Ramírez-Montoya et al. (2023), who advocate for context-sensitive educational innovations rooted in emerging technologies and local realities. The implication is that equity cannot be achieved through generic interventions, but through iterative and participatory design that accounts for differentiated experiences.

Moreover, these findings affirm the potential of open education as a medium for equitable transformation when it is embedded within collaborative and well-structured processes. While the Dubai Declaration (UNESCO 2024) highlights the global relevance of OER, this study emphasizes that accessibility alone is not sufficient. The co-creation of OER, when geared towards marginalized groups in particular, ensures that educational content is as open as inclusive in form and meaning. This perspective is supported by Cubides, Chiappe & Ramirez-Montoya (2024), who link the collaborative production of OER to the development of 21st-century skills and the strengthening of community identities. From a policy standpoint, this underscores the need for funding and institutional frameworks that support the distribution of OER that include the participatory processes through which they are created. For example, the participatory design of language integration indicators in Horgan et al. (2021) demonstrates how co-created OER can address both functional and cultural needs, ensuring that resources are not only accessible but also contextually meaningful.

Illustrative scenarios of INSPIRA's application might include co-created curricula in multicultural classrooms, inclusive admissions processes collaboratively redesigned with community input, or the development of institutional policies through multi-stakeholder participatory workshops.

Finally, the cross-case analysis illuminates the value of participatory frameworks like INSPIRA in offering structured guidance for equity-driven innovation. Grounded in empirical patterns and collective insights, INSPIRA does not prescribe universal solutions but encourages institutions to co-develop inclusive strategies aligned with their own contexts and stakeholders. This aligns with Partelow's (2023) view that frameworks serve as tools for flexible yet principled action in complex systems. The implication is twofold: researchers should continue refining such frameworks through comparative and longitudinal studies, and institutions should adopt them not as fixed models but as dynamic guides that evolve through implementation and reflection.

5. CONCLUSION

This study addressed how co-creation can promote inclusion and equity in open educational contexts through the active engagement of diverse stakeholders. Based on the analysis of 20 co-creation experiences, the INSPIRA framework was developed to guide co-creation strategies that facilitate the development of contextualized educational resources by actively including diverse voices, promoting meaningful dialogues, and generating relevant solutions for specific educational communities in higher education.

Findings suggest that educational institutions, educators, and policymakers should support co-creation processes that integrate diverse community experiences, acknowledging the need to adapt educational content to varied cultural and social contexts. Four core components—open dialogue, role reframing, actionable strategies, and the involvement of key informants—emerged inductively from the qualitative analysis. These elements form the conceptual foundation of the INSPIRA framework, grounding it in the lived realities of educational stakeholders.

Nonetheless, several limitations must be acknowledged. This study draws on a limited sample of studies selected through specific criteria, which constrains the generalizability of its findings. Furthermore, while the Grounded Theory approach provided an appropriate logic of inquiry, the

connection between the reviewed literature and the resulting framework components could be strengthened through more detailed analytical illustrations. Future research should therefore consider longitudinal studies to assess the impact of INSPIRA's implementation in different institutional settings and empirically validate its components through observed outcomes.

It is also important to emphasize the exploratory nature of this research. INSPIRA should not be viewed as a prescriptive model but rather as a dynamic and adaptable tool. Institutions are encouraged to reinterpret its phases and components in light of their local realities, capacities, and communities. As such, future applications of the framework should document how it is contextually adapted, as well as the challenges and tensions encountered in practice.

Finally, this research underscores the necessity of clear structures for the effective implementation of educational co-creation. These include explicit definitions of roles, responsibilities, and timelines, as well as supportive institutional policies to ensure sustainability. Future research should further explore how governance structures shape the implementation and long-term impact of inclusive co-creation. Moreover, incorporating an intersectional analytical lens would allow for a more nuanced understanding of how multiple identities and inequalities intersect within these participatory processes, contributing to a deeper and more comprehensive approach to educational inclusion.

ETHICS AND CONSENT

No original data collection was conducted and, therefore, no ethical approval was needed. The study did not involve human participants, personal data, or interventions requiring ethics review. The data analyzed were drawn exclusively from publicly available sources.

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The authors declare that aspects of language improvement (such as synthesis, paraphrasing, translation and style correction in English) were carried out with the assistance of the GPT-4o Generative Artificial Intelligence tool. All modifications were carefully reviewed to ensure consistency with the intended message and adherence to academic and professional standards.

COMPETING INTERESTS

The authors have no competing interests to declare.

AUTHOR CONTRIBUTIONS

I. Alvarez-Icaza was responsible for the overall conception and design of the study, as well as the acquisition and analysis of data. She also led the drafting of the manuscript and critically revised its content for substantial intellectual contributions. M. Usart-Rodríguez contributed to the interpretation of the data and participated in the drafting of the manuscript. P. Torres-Sánchez was involved in data interpretation and also contributed to the manuscript drafting process. BJ. Martínez-Briones participated in the interpretation of data, contributed to the drafting of the manuscript, and critically revised it for important intellectual content. All authors approved the final version of the manuscript for publication, agreed to be accountable for all aspects of the work, and confirmed their agreement to be listed as authors in the specified order.

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