Enhancing cultural inclusivity in primary schools: insights from Springer multicultural education data

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Article Info

ABSTRACT

Multicultural education is an essential approach for fostering inclusivity and promoting diversity within primary school settings. This systematic literature review aims to explore the issues employed in multicultural education within primary schools, utilizing a data source from Springer, a renowned academic publisher. This research applies the systematic review literature method with the preferred reporting items for systematic reviews and meta-analysis (PRISMA) protocol. The review examines scholarly articles published between 2018 and 2023 to identify trends, challenges, and best practices in the field. The findings of this review have implications for educators, policymakers, and practitioners in the field of education. The identified best practices, such as problem-based learning, social-emotional learning, and virtual field trips, can guide the development of curriculum frameworks, instructional approaches, and professional development programs that prioritize multicultural education in primary schools.

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1. INTRODUCTION

Multicultural education, a pedagogical approach that emphasizes the significance of students' diverse cultural backgrounds within the educational milieu, stands as a powerful instrument [1], [2]. Its fundamental objective is to cultivate a sense of comprehension [3], respect [4], and admiration [5] for various cultures, concurrently championing equal educational opportunities for all pupils [6]–[8]. In our progressively interconnected and diverse global landscape, multicultural education emerges as a pivotal factor in preparing students to thrive within an increasingly globalized society [9], [10].

Notably, primary schools, as the cornerstone of educational institutions, occupy a pivotal role in propagating multicultural education [11]. By imbuing cultural proficiency and actively addressing biases and stereotypes from a tender age, primary schools can lay the foundation for inclusive learning environments that exalt diversity [12]. Extensive research underscores the affirmative impact of multicultural education in primary schools, benefiting students in terms of academic achievement, social-emotional development, and the refinement of intercultural communication skills.

Springer, a highly regarded academic publisher, offers an extensive repository of scholarly articles encompassing diverse educational themes, including multicultural education [13]. Leveraging Springer's comprehensive database, this systematic literature review (SLR) endeavors to pinpoint and scrutinize the

existing body of research on multicultural education within primary schools. Through an exhaustive analysis of scholarly articles published from 2018 to 2023, this review seeks to deepen our understanding of emerging trends, address challenges, and elucidate best practices in the implementation of multicultural education within primary educational settings. The insights garnered from this systematic literature review promise to be of considerable significance to educators, policymakers, and researchers endeavoring to adopt evidence-based strategies to enhance multicultural education in primary schools. By amalgamating and dissecting the available literature, this review is poised to offer a panoramic view of the present landscape, illuminate areas meriting further investigation, and proffer practical implications for the efficacious implementation of multicultural education within primary school contexts.

2. RESEARCH METHOD

2.1. Research design

The research methodology adopted for this study employs the SLR method, a structured approach aimed at identifying, assessing, and evaluating existing research to address specific research questions posed by the researchers [14]. In the context of this article, the SLR method is employed to delve into the multifaceted issues related to multicultural education in primary schools. This research initiative initiated with the meticulous identification of pertinent articles within the realm of multicultural education in primary schools, utilizing the expansive Springer database. The systematic literature review adheres to the preferred reporting items for systematic reviews and meta-analyses (PRISMA) technique, a recognized framework for conducting comprehensive systematic reviews [15]. This study specifically focuses on the identification of trends, challenges, and best practices in multicultural education within primary schools, a task executed through a rigorous four-stage process encompassing identification, screening, feasibility assessment, and inclusion of articles of interest [16], [17].

This review aligns with the established systematic review phases, namely, literature search, selection, and analysis of relevant studies. For the literature search, our scope encompassed English-language publications, ensuring a broad engagement with the global academic community. To commence the search, we employed "multicultural education" as the primary keyword within the Springer database, one of the foremost repositories catering to academia, scientific institutions, and corporate research and development endeavors. We limited our focus to articles published between 2018 and 2023, a period coinciding with a surge in research concerning the integration of multicultural education into primary school contexts, as indicated by prior literature reviews. Concentrating on this timeframe facilitates the creation of a contemporary and comprehensive overview of research in the domain of multicultural education within primary schools. Our rigorous literature search process yielded a total of 439 full-text records for consideration.

During the literature selection stage, we applied stringent exclusion criteria to the 439 records, retaining only those studies that explicitly addressed multicultural education within primary schools. Literature primarily focusing on multicultural education in non-primary school contexts was excluded from our analysis, leading to the removal of 247 studies and the retention of 168 articles. Employing the PRISMA method, we systematically scrutinized these 168 articles from the Springer database, ultimately identifying 47 articles for detailed data extraction and analysis. This systematic review, thus, serves as a valuable resource, offering profound insights into the prevailing issues surrounding multicultural education in primary schools. It sheds light on critical themes and emerging trends within the existing body of literature, making significant contributions to the field of multicultural education. Furthermore, the findings from this review carry practical implications for educators, policymakers, and researchers, while also guiding future research directions in this important area.

2.2. Inclusion and exclusion criteria for selection of publications

During the stage of inclusion and exclusion, specific criteria were established to determine the eligibility of articles for inclusion in this research [18]. Firstly, the search was confined to articles exclusively published by Springer. Secondly, the articles under consideration were limited to those published in journals between the years 2018 and 2023. Thirdly, inclusion was extended solely to articles written in the English language. Lastly, the selection of articles was guided by their relevance and alignment with the overarching theme and research topic of this study.

2.3. PRISMA flow diagram

The chosen articles were extracted during the screening and eligibility assessment stages to facilitate subsequent data analysis [19]. Each article was thoroughly reviewed, encompassing a comprehensive examination from its title through to its conclusion. Following this comprehensive review, the findings were

meticulously analyzed, and the outcomes were organized in alignment with the research questions posed. The intricacies of this search process are visually represented in Figure 1 through the utilization of the PRISMA flow diagram.
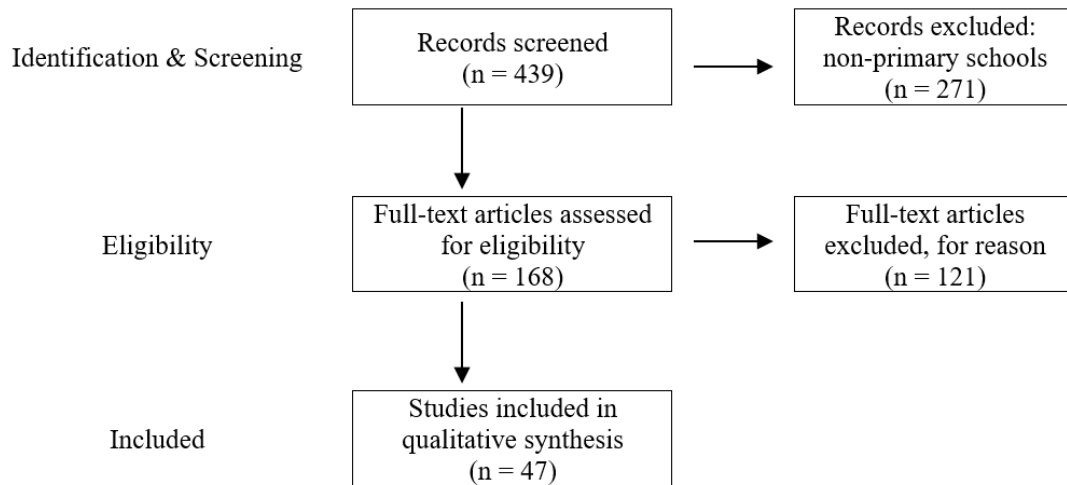

Figure 1. Flowchart of search and screening process [20], [21]

In order to comprehensively assess the landscape of research on multicultural education within primary schools, a meticulous literature search was conducted. The search spanned the years from 2018 to 2023, encompassing the most recent scholarship in this dynamic field. Figure 2 visually represents the distribution of selected research papers across these years. It provides a valuable snapshot of the temporal trends in multicultural education within the primary school context, shedding light on the evolving discourse and highlighting key areas of focus in recent scholarship.
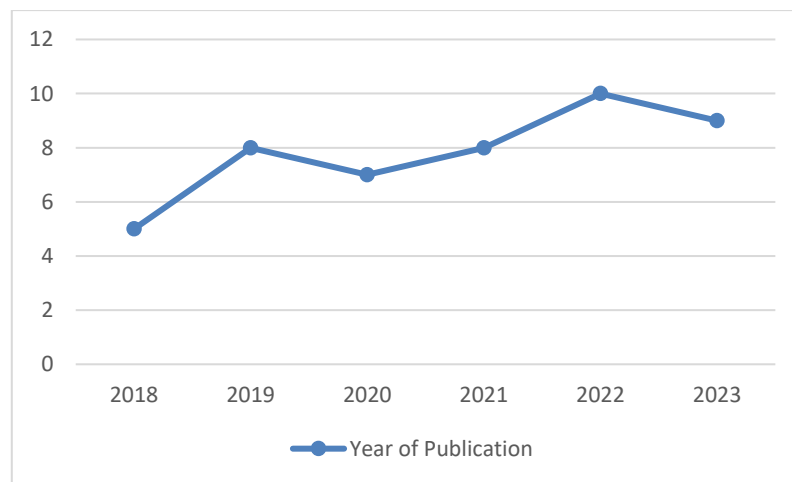

Figure 2. Papers selected via literature search by year of publication (2018-2023)

Moreover, to further deepen our understanding of the multifaceted nature of research in multicultural education within primary schools, we conducted a mapping of the results extracted from 47 selected articles. Table 1 presents a structured overview of how these studies align with various aspects of the research focus. It serves as a valuable tool for visualizing the thematic diversity and interconnections among the selected articles, illuminating the nuanced and interconnected dimensions of this important educational field.

Table 1. Mapping results of 47 articles based on links to focus of research

No	Issue	Author	Country
1	Technology integration support [22]	Kristin A. Searle	USA
2	Benefits of STEM curricula [23]	Alberto J. Rodriguez	USA
3	School personnel awareness [24]	Anabel Corral-Granados	Norway
4	Benefits of cultural differences [25]	Jorryt van Bommel	Sweden
5	Enhancing global education [26]	Stacy Delacruz	USA
6	Importances of students' mental health [27]	Tia Navelene Barnes	USA
7	School stakeholder roles [28]	Bethany Hardie	New Zealand
8	Ethnic minority education development [29]	Qian Liu	China
9	Language skill to improve interethnic relationships [30]	Sabine Pirchio	Italy
10	Cultural aspects in student literature [31]	Karen Renaud	UK
11	Environmental Health Literacy roles [32]	Sarah V. Benevento	USA
12	CSEL to create transformative spaces [33]	K. A. Goodman	New Zealand
13	Technology support [34]	Amanda Sullivan	Singapore
14	Overcoming dominant & non-dominant students [35]	Eunyoung Lee	USA
15	Reducing ethnic prejudice through storybooks [36]	Christia Spears Brown	Indonesia
16	Families' roles in promoting self-determination skills [37]	Szu-Yin Chu	Taiwan
17	Student critical reasoning development [38]	Honglin Chen	Australia
18	Gender equity through picture books [39]	Helen Adam	Australia
19	Race, racism and racial bias understanding [40]	Hannah Yared	Australia
20	General capabilities [41]	Don Carter	Australia
21	Students' socio-emotional skills [42]	Gabrijela Aleksić	Serbia
22	Traditional learning space effects [43]	Jo Fletcher	New Zealand
23	The discrepancy of global citizenship education [44]	Cuicui Li	China
24	Strengthen students' identities by picture books [45]	Victoria Cardullo	USA
25	School administrator awareness [46]	Tawanda Majoko	Zimbabwe
26	Pre-service teacher multicultural awareness [47]	Noelene Weatherby-Fell	Australia
27	Enhancing citizenship through data science [48]	Katie Makar	Australia
28	Student psychological learning support [49]	Ainur Kulshayeva	Kazakhstan
29	Families' roles in fostering children identity [50]	Chelsea Freeborn	Canada
30	The cultural factors influencing learning [51]	Amani K. Hamdan Alghamdi	Saudi
31	Gender, subjectivity, and the life-worlds understanding [52]	Glenn Saxby	Australia
32	Engaging students' awareness through DGBL [53]	Melanie M. Acosta	USA
33	Teachers' awareness skill [54]	Lucy Avraamidou	Netherlands
34	Teachers' assessment skill [55]	Phillip Poulton	Australia
35	Primary teacher challenges [56]	Pramod K. Sah	Nepal
36	Teachers' communication skill [57]	Sally Ann Jones	Singapore
37	Student self-awareness development [58]	Helen Adam	Australia
38	Teachers' communication skill [59]	Nora Alicia Luna	Mexico
39	Racial equity through picture books [60]	Caitlin F. Spear	USA
40	Science and society connection in global education [61]	Pei-I Chou	Taiwan
41	Religious education roles [62]	Kerrin Huth	Australia
42	Co-working in community skills [63]	Jessica Premier	Australia
43	Language policy support [64]	Yan Guo	Canada
44	Benefits of art [65]	Susan Narelle Chapman	Australia
45	School policy support [66]	Hae Min Yu	USA
46	School policy support [67]	Laure Kloetzer	Switzerland
47	Community skill [68]	Eseta Tualaulelei	Australia

3. RESULTS AND DISCUSSION

3.1. Trends

This systematic review revealed several trends across various areas, including i) technology integration; ii) the internet of things (IoT); iii) science, technology, engineering, and mathematics (STEM) education; iv) mental health issues; v) socio-emotional skills development; vi) gender development; vii) global education; and viii) immigrant students. These themes and trends highlight important aspects of multicultural education that have gained significant attention in recent research. Integrating technology into multicultural education practices has been emphasized by many studies. Technology tools [22], such as digital resources [53], online platforms [34], and multimedia, enhance students' intercultural communication, collaboration, and understanding. They provide access to diverse perspectives, cultural resources, and interactive learning experiences. Additionally, the use of IoT technologies [34], including virtual reality (VR) [26], augmented reality (AR), and smart devices, offers immersive and interactive learning opportunities that promote cultural understanding and cross-cultural collaboration. Technology integration in multicultural education creates inclusive and dynamic learning environments that cater to diverse student needs [43]. However, challenges include access to technology resources [22], educator training, and ensuring equitable access for all students. Despite the challenges, technology-driven multicultural education has the potential to enhance intercultural understanding and digital literacy skills among students.

Multicultural education is increasingly intersecting with (STEM) education to promote equity, inclusivity, and cultural relevance in STEM learning [23]. Researchers have emphasized the value of incorporating diverse cultural perspectives and examples into STEM curricula [51]. This integration aims to foster students' engagement and achievement in these fields by creating inclusive learning environments [32] that resonate with students from diverse backgrounds [25]. By infusing STEM instruction with multicultural elements, educators can bridge the gap between academic knowledge and real-world applications [56], enhance students' motivation and sense of belonging [58], and cultivate critical thinking skills [38] necessary for addressing complex global challenges [44]. However, challenges exist in accessing appropriate resources and providing professional development for educators. Continued efforts are needed to further integrate multicultural education into STEM and maximize its potential benefits for students.

The review findings indicate a growing recognition of the significant impact of multicultural education on students' mental health and overall well-being. Strategies that promote cultural competency, empathy, and the creation of inclusive environments were identified as key contributors to positive mental health outcomes among students [27]. Multicultural education plays a crucial role in addressing the mental health needs of diverse student populations and reducing mental health disparities.

In the context of primary schools, there has been an increasing emphasis on the development of socio-emotional skills [33] within multicultural education. These skills, including empathy [42], respect, tolerance [44], conflict resolution [59], and intercultural communication [30], are seen as essential for fostering positive relationships and promoting social cohesion. Researchers have underscored the importance of incorporating explicit instruction and engaging activities that promote socio-emotional skills alongside the cultivation of cultural knowledge and awareness.

Moreover, multicultural education encompasses considerations of gender development. Research in this area has explored strategies to promote gender equality [52], challenge stereotypes [39], and create inclusive learning environments [32]. Efforts have focused on implementing gender-responsive pedagogies, incorporating inclusive curriculum materials, and providing teacher training [35] that addresses the specific needs and experiences of students of different genders. By addressing gender-related issues within the context of multicultural education, schools can create more equitable and supportive environments that empower all students.

The findings of the review demonstrate that multicultural education in primary schools has increasingly embraced a global perspective. Global education has emerged as a vital component of multicultural education, aiming to cultivate students' global awareness [44], intercultural competence [48], and understanding of global issues. By exploring diverse cultures, promoting global citizenship, and fostering respect for cultural differences, global education initiatives have proven to enhance students' knowledge of the world and their ability to engage with global challenges [44].

Additionally, the review emphasizes the importance of addressing the unique needs and experiences of immigrant students within the context of multicultural education. Studies have delved into strategies for supporting the integration, language acquisition [64], and academic success of immigrant students. Culturally responsive teaching approaches that consider the cultural backgrounds and experiences of immigrant students [67], community engagement initiatives that involve families and communities in the educational process [63], and targeted interventions designed to meet the specific needs of immigrant students [66] have been identified as effective practices in supporting their development and overall well-being.

3.2. Challenges

This review identified several challenges that educators, students, and families face in implementing and experiencing multicultural education. These challenges encompass various aspects that impact the effectiveness and inclusivity of multicultural education. Firstly, cultural differences present a significant challenge [25] in understanding and appreciating diverse perspectives. Educators must navigate cultural nuances [47], language barriers [57], and varying traditions to create an inclusive and culturally responsive learning environment [41]. Efforts should be made to foster mutual understanding [40] and respect among students from different cultural backgrounds.

Secondly, combating ethnic prejudice is crucial for the success of multicultural education. Bias [40] and prejudice based on ethnicity or race [60] can undermine the goals of inclusivity and cultural understanding [36]. Overcoming stereotypes [40], challenging discriminatory attitudes [24], and promoting intercultural understanding require collective efforts from educators and students alike [56].

Thirdly, fostering student awareness of different cultures and perspectives is essential. Some students may lack exposure to diverse cultures [31], leading to limited understanding [29] or misconceptions. Educators must actively engage students in multicultural experiences, encourage dialogue [68], and provide authentic learning opportunities to broaden their cultural awareness and appreciation [65].

Managing teacher perceptions and attitudes is another challenge that affects the implementation of multicultural education. Some teachers may feel unprepared [28] or hesitant to address sensitive cultural

topics, fearing potential conflicts or discomfort. Overcoming these challenges requires comprehensive professional development programs [35] that equip teachers with the necessary knowledge [46], skills [30], and confidence [49] to effectively facilitate multicultural education.

Furthermore, multicultural education may encounter resistance from families who hold traditional or conservative values [50]. Differing perspectives on cultural practices, gender roles, or religious beliefs can create tensions between home and school environments [37]. Building trust [49] and establishing open lines of communication between educators and families [63] is essential to navigate these challenges and ensure that multicultural education aligns with family values while promoting inclusivity.

The accommodation of multicultural perspectives within conventional curricula is also a challenge. Many curricula may lack diverse content [45] and perspectives [66], making it challenging to incorporate multicultural perspectives. Efforts should be made to adapt and infuse multicultural content across various subjects to provide a comprehensive and inclusive educational experience [23].

Creating an inclusive student environment that respects and values diversity requires intentional efforts [43]. Addressing issues such as bullying [27], discrimination [35], and exclusion based on cultural differences is essential. Educators must foster a safe [54] and supportive atmosphere [49] where students feel comfortable expressing their identities and engaging in intercultural interactions. These challenges highlight the need for ongoing professional development, inclusive curriculum development, and effective communication among educators, students, and families [63]. By actively addressing these challenges, educators can create more inclusive and equitable learning environments that promote the benefits of multicultural education for all students.

3.3. Best practices

We recognized a few best hones that contribute to successful usage and positive results. These practices encompass a range of strategies and approaches that promote inclusive and culturally responsive learning environments. The following paragraphs outline some of these best practices.

3.3.1. Problem-based learning

Problem-based learning is an effective approach that engages students in authentic tasks, promoting critical thinking [38], collaboration [63], and problem-solving skills [52]. When incorporated into multicultural education, problem-based learning provides students with opportunities to explore real-world issues from diverse perspectives [22]. By analyzing and solving problems within a multicultural context, students not only develop cognitive and social-emotional skills but also gain a deeper understanding and appreciation for different cultural viewpoints [61]. This approach encourages empathy [58], cultural competence, and a broader understanding of the complexities of cultural diversity [44].

3.3.2. Scientific practice

Integrating scientific practices into multicultural education offers students a powerful avenue to explore cultural phenomena through the lens of scientific inquiry [23]. By incorporating scientific investigation, students are encouraged to delve into cultural practices, traditions, and phenomena, allowing for a deeper understanding and appreciation of diverse cultures. Through hands-on exploration and analysis [22], students develop a sense of curiosity and critical thinking skills [38] as they investigate cultural phenomena using scientific methods. This approach not only enhances their scientific literacy but also fosters cultural understanding by connecting scientific concepts to real-world cultural contexts [61].

Scientific practices within multicultural education provide students with opportunities to engage in meaningful and authentic learning experiences [23]. By actively participating in scientific investigations that focus on cultural aspects, students are encouraged to ask questions, collect data, analyze evidence, and draw conclusions. This process allows them to develop a broader understanding of cultural diversity and its intersections with scientific principles. Moreover, integrating scientific practices promotes an interdisciplinary approach, bridging the gap between science and culture. Students gain a deeper appreciation for the rich diversity of cultural practices and traditions, fostering a sense of respect, empathy, and cultural competence.

3.3.3. Learning communities

Creating learning communities within primary schools is crucial for fostering collaboration, dialogue, and shared experiences among students, teachers, and families [63]. By establishing these communities, students have the opportunity to actively engage with their peers from diverse cultural backgrounds [37], promoting a sense of inclusivity and respect. Through collaborative projects, group discussions [40], and cooperative learning activities, students develop interpersonal skills [30], cultural competence, and a deeper appreciation for diversity. These learning communities provide a safe and

supportive space where students can freely express their identities, share their cultural experiences, and learn from one another.

In addition to student interactions, learning communities also foster meaningful connections between teachers and families [37]. Collaborative partnerships between teachers and families ensure that multicultural education initiatives are aligned with the values and expectations of the community [67]. By involving families in the learning process, teachers gain valuable insights into students' cultural backgrounds, experiences, and needs [55]. This collaboration enables teachers to create culturally responsive instructional practices and curriculum materials that reflect the diverse identities and perspectives of their students. Furthermore, when teachers, students, and families work together in a learning community, a sense of belonging and shared responsibility is cultivated, leading to increased student engagement, academic achievement, and overall well-being.

By establishing learning communities within primary schools, educators can create an environment that encourages collaboration, dialogue, and shared experiences. These communities foster inclusivity, respect, and cultural understanding among students, teachers, and families. By embracing diversity and strengthening connections within the school community, the effectiveness of multicultural education initiatives is enhanced, ensuring that every student feels valued, supported, and empowered to succeed.

3.3.4. Social-emotional learning

Integrating social-emotional learning (SEL) into multicultural education is a powerful combination that supports the holistic development of students [33]. SEL helps students cultivate empathy, self-awareness, and interpersonal skills [42], which are essential for building respectful and inclusive relationships with peers from diverse cultural backgrounds. By incorporating SEL practices, educators create a supportive environment [43] where students learn to recognize and manage their emotions, communicate effectively, and appreciate the value of cultural diversity.

Through SEL, students develop empathy by gaining a deeper understanding of the experiences, perspectives, and emotions of individuals from different cultural backgrounds. This empathetic mindset allows students to build connections and foster a sense of belonging with their peers [58], regardless of their cultural differences. SEL also promotes self-awareness, helping students recognize their own cultural biases, values, and attitudes. This self-reflection empowers students to approach multicultural interactions with an open mind and a willingness to learn from others [40].

Furthermore, SEL equips students with the interpersonal skills necessary for effective communication and collaboration in diverse settings [40]. They learn to navigate cultural differences, resolve conflicts respectfully, and appreciate multiple perspectives. By integrating SEL into multicultural education, educators create a space where students can develop essential social-emotional competencies while embracing and celebrating the richness of cultural diversity.

3.3.5. Virtual field trips

Virtual field trips offer opportunities for students to virtually explore cultural sites, museums, and communities worldwide. These experiences enable students to gain exposure to diverse cultures, traditions, and perspectives [26], even when physical field trips are not feasible. Virtual field trips provide an interactive and immersive way for students to engage with cultural diversity and broaden their understanding of the world.

One of the key advantages of virtual field trips is their ability to transcend geographical limitations. Students can virtually step into historical landmarks, vibrant communities, and significant cultural sites, immersing themselves in rich and diverse cultural experiences [34]. Through multimedia presentations, interactive simulations, and virtual reality platforms, students can engage with authentic artifacts, witness cultural performances, and interact with local communities. This immersive approach fosters a deeper understanding and appreciation of cultural diversity, helping students develop a global perspective [53] and a sense of interconnectedness with people from different backgrounds.

Moreover, virtual field trips offer flexibility and inclusivity. They can be tailored to suit students' learning needs and interests, accommodating various learning styles and abilities. Virtual experiences also allow for repeated visits, enabling students to revisit cultural sites and delve deeper into their understanding. Additionally, virtual field trips provide equitable access to cultural experiences for students who may face financial, logistical, or other barriers to physical travel. By integrating virtual field trips into multicultural education, educators provide students with engaging and enriching opportunities to explore, appreciate, and connect with diverse cultures from around the world.

3.3.6. Foreign language skills

Incorporating foreign language instruction into multicultural education has been recognized as a powerful way to enrich students' cultural understanding [30] and promote intercultural communication [60].

Learning a new language exposes students to different cultures, traditions, and perspectives, allowing them to develop a deeper appreciation for cultural diversity. By acquiring foreign language skills, students gain the ability to communicate with individuals from various linguistic backgrounds, fostering meaningful connections and facilitating cross-cultural dialogue.

Foreign language instruction not only equips students with practical communication skills but also opens doors to new cultural experiences [64]. Language learning goes beyond grammar and vocabulary; it immerses students in the intricacies of another language's expressions, idioms, and cultural nuances. Through language acquisition, students gain insights into the values, beliefs, and customs of the communities that speak the language. This deeper understanding enhances their intercultural sensitivity and promotes respect for different cultural practices.

3.3.7. Picture book

Picture books play a vital role in the literacy development of students within multicultural education. These books serve as windows and mirrors, offering glimpses into diverse cultures while reflecting students' own experiences [60]. By incorporating culturally relevant picture books into the curriculum, educators provide students with valuable opportunities to explore diverse narratives, gain insights into different cultures [36], and develop a deeper understanding of the world.

Multicultural picture books act as powerful tools for promoting cultural understanding [45], empathy, and respect. Through captivating illustrations and engaging storytelling, these books transport readers to different parts of the world, introducing them to diverse traditions, languages, and customs. Students are exposed to a rich tapestry of experiences, fostering a sense of curiosity, wonder, and appreciation for the beauty of cultural diversity.

In addition to cultural exploration, multicultural picture books encourage critical thinking skills [39]. They invite readers to question stereotypes, challenge biases, and analyze multiple perspectives. By engaging with characters from different cultural backgrounds, students develop their capacity for empathy, recognizing the shared human experiences that transcend cultural boundaries. This process of critical literacy empowers students to become active, discerning readers who can navigate the complexities of a diverse and interconnected world. By incorporating multicultural literature into the classroom and promoting critical literacy skills, educators create an inclusive and enriching learning environment. Picture books become gateways to understanding, enabling students to celebrate their own identities, learn about others, and cultivate a deep appreciation for the myriad of cultures that shape our global community.

3.3.8. Data science investigation

Multicultural education has the potential to empower children as agents and advocates for social change. By integrating data science investigation into the curriculum, students are positioned as active participants in exploring and understanding cultural phenomena through a scientific lens [48]. Engaging in data analysis and interpretation, students develop essential skills such as critical thinking, quantitative reasoning [38], and problem-solving [22].

Data science investigation in multicultural education allows students to examine cultural patterns, make data-driven observations, and draw meaningful conclusions [48]. They become adept at collecting and analyzing data related to diverse cultures, gaining insights into societal issues [42], cultural practices, and the experiences of different communities [44]. Through this process, students develop a deeper understanding of the complexities of cultural diversity and recognize the significance of data-driven decision-making in promoting inclusivity and social justice.

By positioning children as agents and advocates through data science investigation, multicultural education empowers them to actively engage in the exploration and interpretation of cultural data. This approach fosters their analytical skills, encourages curiosity, and nurtures a sense of agency in addressing cultural biases and promoting inclusivity. By understanding the power of data, students are equipped with the tools to challenge stereotypes [40], advocate for cultural understanding, and contribute to building a more equitable and inclusive society.

3.3.9. Religious education and afterschool programs

Multicultural education plays a crucial role in addressing religious diversity within educational settings. By providing education about different religions and promoting religious tolerance [62], it creates an environment where students can engage in respectful and inclusive discussions [40] about religious beliefs and practices. Through these discussions, students gain a deeper understanding of various faith traditions, reduce prejudice, and foster religious pluralism.

Integrating religious diversity into the curriculum helps to dispel misconceptions, stereotypes [36], and biases [40] surrounding different religions. It encourages students to critically analyze and appreciate the

richness of various belief systems, promoting empathy and respect for religious differences. By offering a comprehensive understanding of religious diversity, multicultural education equips students with the knowledge and skills necessary to navigate a pluralistic society.

In addition to classroom education, afterschool programs that embrace multicultural education principles further enhance students' exposure to diverse cultures [66] and religious traditions. These programs provide extended opportunities for students to engage in cultural enrichment activities [67], such as festivals, workshops, and community service projects. By actively participating in these activities, students broaden their perspectives, strengthen their intercultural competence, and develop a sense of appreciation for the richness of religious diversity. Through its commitment to religious education and the promotion of religious tolerance, multicultural education cultivates an inclusive and harmonious learning environment where students learn to celebrate and respect religious differences [40]. By embracing diversity and fostering cultural understanding, multicultural education prepares students to become global citizens who contribute positively to a diverse and interconnected world.

4. CONCLUSION

In summary, the systematic review unveils key trends in multicultural education, encompassing technology integration, STEM, mental health, socio-emotional skills, gender, global education, and immigrant support. It champions tech for intercultural understanding and digital literacy, while stressing the need for diverse cultural perspectives in STEM for inclusivity. Acknowledging challenges faced by educators, students, and families, it includes navigating cultural differences, countering ethnic bias, fostering cultural awareness, managing teacher attitudes, addressing family resistance, adapting curricula, and creating inclusive environments. Solutions demand continuous professional development, inclusive curricula, and effective communication. Best practices for successful multicultural education involve problem-based learning, scientific inquiry, community building, social-emotional learning, virtual field trips, language instruction, multicultural literature, and data-driven investigation. These foster inclusivity, critical thinking, empathy, collaboration, and cultural appreciation.

Despite its value, the review has limitations, including study availability and scope, and potential publication bias. Primarily focusing on primary schools, it may not capture nuances in other educational levels. Further research is vital to assess best practices in diverse contexts. In conclusion, the review underscores multicultural education's role in fostering inclusive, equitable learning. It highlights benefits, challenges, and practices, aiding educators, policymakers, and researchers in promoting diversity, equity, and cultural understanding in education.

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