A Review of Educational Strategies for Multilingual Children in the North American Classroom

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Abstract. Multilingual education has gained increasing attention as a crucial element of equitable and effective classroom practice. Scholars have advocated for advancing beyond traditional support models by integrating culturally sustaining pedagogies, translanguaging practices, asset-based approaches, dynamic assessments, and strong school–family partnerships. However, there is limited synthesized knowledge on how these advanced pedagogical strategies are currently theorized and implemented in multilingual classroom settings. This review aims to expand understanding of emerging practices that center multilingual children's strengths, identities, and learning needs. Findings revealed that relevant studies primarily emphasized two interconnected approaches: (a) promoting culturally and linguistically sustaining classroom environments through asset-based and community-engaged strategies, and (b) utilizing translanguaging and dynamic assessment methods to enhance multilingual learners' cognitive development and academic success. The author provides a detailed overview of these practices and proposes useful frameworks for organizing and applying them in educational settings. Finally, the author highlights key implications for future classroom practice, teacher education, and policy development.

Keywords: Multilingualism, Multiculturalism, Education, Pedagogy, K-12 Classrooms

1. Introduction

As in recent years, global migration has diversified K-12 schools. Classrooms have become the initial environment outside the home where immigrant-origin students encounter new languages and cultural norms. Many of these students primarily speak languages other than English within their families, it makes school education important for their academic and multilingual development [1].

Multilingualism allows children to preserve their heritage language while also acquiring proficiency in the societal language which significantly impacts their overall integration success [2]. Multiple studies have emphasized that multilingualism has a critical role in various aspects of immigrant children's well-being. These studies showed that maintaining the home language has been linked with a strengthened ethnic identity, improved family relationships, and enhanced psychological regulation [1,3,4]. Additionally, multilingualism is strongly associated with academic benefits, as proficiency in both heritage and societal languages enhances skills that directly support educational success in diverse classroom settings [5,6]. Furthermore, multilingual abilities further expand students' future employment opportunities [7] and are correlated with potential cognitive

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advantages compared to monolingual people, such as superior executive functions and perspectivetaking abilities beyond daily activity, even in older age [8,9].

As there are growing population of multicultural and multilingual students in the classrooms, educators and researchers have been actively developing advanced pedagogical strategies to help immigrant children with multilingual identities. However, there is lack of comprehensive reviews on what pedagogies and approaches K-12 teachers can use in their classrooms that can improve and support multilingual development and multiculturalism. This paper aims to explore six commonly used strategies and approaches in teaching multilingual students and will help frontline teachers to gain a relatively comprehensive insight on useful pedagogies in practice.

2. Implications for multilingual child education

2.1. Translanguaging practices

Translanguaging is different from the concept of code-switching, it views language use as fluid and interconnected, which enables learners to understand meaning across various linguistic and semiotic systems without any limits.

Translanguaging in an educational context represents a teaching method that incorporates two or more languages in instruction; in essence, translanguaging pedagogy is purposefully planned by teachers to activate students' language abilities throughout the learning process [10]. Translanguaging pedagogy aims to enhance multilingual students' classroom engagement and knowledge building. A research conducted in a Chinese-English immersion program in elementary schools by Du [11] underlined that those students actively utilized both languages during science and mathematics lessons, even in an environment where an English-only rule was enforced.

Translanguaging allows students to apply their full range of language capabilities when dealing with challenging concepts [12]. In a classroom where an English-only rule is enforced, such as in the English as a Medium of Instruction (EMI) science labs in Hong Kong, students naturally apply translanguaging approaches when developing leaning science related subjects and constantly use both English and Chinese to help them communicate and learn. This indicates that translanguaging not only aids comprehension of the material but also enhances language skill development, especially in subjects that require considerable cognitive loads. The review by Hou et al. [13] provided more evidence for the academic benefits of translanguaging practice in K-12 science education. According to their findings, translanguaging techniques in the classroom promote bidirectional reasoning, allowing multilingual students to work together to use verbal, visual, and gestural resources to interact more fully with scientific concepts.

2.2. Culturally sustaining pedagogies

Culturally sustaining pedagogy (CSP) is an educational strategy that supports the cultural and linguistic strength of multilingual and multicultural students [14]. This pedagogy is built on the belief that students' cultural and linguistic backgrounds are important resources rather than obstacles to academic success [15]. To promote equity in multilingual classrooms, this involves intentionally integrating and maintaining students' different cultural identities, customs, and linguistic repertoires within the educational setting [16].

CSP focuses on the larger political and socioeconomic facts that students encounter and engage in beyond language use. Nash et al. [17] underlined four CSP-oriented principles: 1) developing teachers' cultural competency, 2) keeping high expectations for every student, 3) encouraging

critical awareness of social inequalities, and 4) sustaining inclusive linguistic and cultural practices. As a teacher implementing this strategy in the classroom, it can help teachers to maintain the traditions of the communities with which they interact, instead of fostering colonizing forms of Whitestream knowledge [17].

CSP also interact prominently with social justice goals in education since it recognizes that schools often inevitably advocate linguistic hierarchies. Teachers who are using CSP in multilingual classrooms often engage in critical thinking and action to question current language policies and curriculum standards that marginalizing minority languages or dialects [18]. Therefore, these classrooms transform into safe spaces where teachers and students work together to challenge monolingual ideologies and sociolinguistic biases, to create more inclusive and meaningful learning environments [13].

By understanding the interdependent nature of language, culture, and identity, CSP provides teachers practical tools to create classrooms that are inclusive, supportive and academic [16].

2.3. Assert-based pedagogy

Asset-based pedagogy (ABP) is a student-centered approach that supports the cultural, linguistic, and experiential knowledge students bring into the classroom [19]. ABP views diversity as a strength and promotes these diverse resources for academic success and identity development [20]. ABP includes strategies involving incorporating native languages into lessons, combining culturally relevant material into the curriculum, and modifying teaching methods to take into account the unique experiences of the students. For example, Kwok et al.[20] examined open-ended survey responses and found that novice teachers often use scaffolding strategies such as sentence frames, visual aids, and small-group instruction to support linguistic diversity by integrating home languages into their teaching practices. These strategies help students understand academic material better while also strengthening and validating their linguistic and cultural identities.

ABP also plays an important role in enhancing minority students' sense of identity and belonging in school. According to López et al. [21], ABP supports the development of ethnic-racial identity and strengthen relationships at school for Latine youth by consciously recognizing and appreciating their cultural knowledge and community backgrounds. These affirmations are essential in fostering students' psychological well-being and encouraging better academic engagement.

2.4. Dynamic assessment

Dynamic assessment (DA) is a promising classroom-based innovative approach that aims to examine students' potential for language development by focusing on their responsiveness to instruction and support. By integrating assessments into the learning process, this method differs from the traditional, one-time evaluations that are commonly used in conventional classes and only evaluate student's current performance. According to Van Viegen and Jang [22], when paired with flexible and instructive practices, DA such as classroom-based language assessments allows teachers to continue tracking and analyzing of students' multilingual language use in real-world context. Teachers who use dynamic assessment build their evaluations on their in-depth understanding of how students learn, integrate instructional scaffolds, and gather a variety of evidence. However, the implementation of DA requires teachers to have extensive experiences in both assessment literacy and multilingual pedagogy to ensure equitable representation of students' diverse linguistic repertoires [22]. This method underlines the importance of teachers' interpretative responsibilities in

supporting the academic outcomes of multilingual learners and acknowledges that students' language development is adaptable and active.

2.5. Metalinguistic awareness

Metalinguistic awareness refers to the ability to reflect on and manipulate linguistic structures. It allows students to compare and analyze different linguistic systems to improve both language learning and cognitive development [23]. In the study by Xu, Yang, and Pan [24], they examined six aspects of multilingual awareness in Chinese college English as Foreign Language (EFL) teachers, including "crosslinguistic and metalinguistic awareness." This aspect involves recognizing similarities and differences across languages and understanding how languages function, which is essential for guiding students in navigating multilingual environments. The findings showed that participants with a higher degree of multilingualism have a significantly stronger crosslinguistic and metalinguistic awareness.

Metalinguistic awareness in multilingual classrooms plays a part in promoting equity and inclusivity in the classroom. According to García [25], fostering such awareness helps educators challenge monolingual ideologies and support democratic citizenship through language practices. This awareness contributes to culturally sustaining pedagogies that validate students' linguistic repertoires as intellectual resources rather than deficits [24].

Furthermore, translanguaging-based pedagogy in fact often relies on learners' metalinguistic awareness. By comparing language features and drawing from their full linguistic repertoires, students develop deeper content understanding and self-regulation in language use. For example, in translanguaging interventions described by Orcasitas-Vicandi and Perales-Fernandez-de-Gamboa [16], students reported improved critical thinking and self-concept as multilingual speakers, partly because they can reflect and work on language structures from their multilingual repertoire to help them better understand study materials.

2.6. School and family partnership

School and family partnerships are foundational to supporting multilingual learners' development, particularly when they are organized in culturally and linguistically sustaining practices [26]. According to Blair and Haneda [27], it is critical to shift parental participation away from the traditional and school-centered approaches, and toward more cooperative, egalitarian parent- school partnerships. Blair and Haneda [27] argue that these partnerships must position families, especially those from immigrant and non-dominant backgrounds, as equal decision-makers. This includes valuing families' cultural and linguistic assets, prioritizing their goals and concerns, and working to balance power dynamics between home and school [27][28].

Starting in early childhood and continuing through high school, language-focused family engagement emphasizes building reciprocal, trust-based relationships between educators and families [29]. Ragnarsdóttir et al. [30] found that in Iceland, close communication between preschool teachers and parents is essential for fostering children's multilingual development. Their study emphasized that preschool environments should actively incorporate the cultural and linguistic backgrounds of families and establish structured practices that promote inclusion and equity [30].

Student success in science is closely linked to pedagogical practices that intertwine language, literacy, and disciplinary content [31]. Ganesan's [31] research in high school science classrooms suggests that educators should extend these practices beyond the classroom and into family partnerships. When schools collaborate with families as co-educators, they recognize and value their

linguistic resources and cultural knowledge and reinforce students' learning in both home and school environments. For instance, translanguaging can not only enhance comprehension in the classroom but also empower families to assist with science learning at home using their native languages [32]. Consequently, cultivating collaborative relationships with families is not merely an addition but a vital component of linguistically responsive and equitable science education [33].

3. Challenges and future direction

One of the challenges in implementing these pedagogies and approaches is the entrenched monolingual ideologies present in dual language programs, despite the intention to utilize culturally sustaining and translanguaging practices. These programs often impose strict language separation policies that impede bilingual students' natural linguistic behaviors and their content learning. Additionally, teachers working within these programs may encounter institutional pressure to prioritize the use of the target language, which can restrict the application of flexible, student-centered approaches such as translanguaging [11].

Another challenge is the lack of practical training and support for teachers; many educators are not equipped to engage linguistically diverse students in inquiry-based science learning, particularly when language development is overlooked in content instruction. Also, the way these programs are carried out can be negatively impacted by issues like not having enough staff, rules from the pandemic, and not having good ways to involve families, as seen in community-based science education models [22]. From a research perspective, limitations include the narrow linguistic scope of reviewed studies (English-only publications), potential over-reliance on Western science standards like the NGSS, and challenges in objectively coding implications of social justice from article texts, as noted in systematic literature reviews [13].

Further research could investigate effective strategies for implementing multilingual education and culturally sustaining pedagogies in diverse classroom environments. This exploration should especially emphasize how teachers can support students' language identities and foster a sense of belonging. Additionally, future studies could benefit from greater attention to non-English publications, which may offer valuable insights beyond the confines of Western science standards.

4. Conclusion

This review highlighted the growing importance of multilingual education in building equitable, inclusive, and academically enriching classroom environments. By reviewing and analyzing current research on translanguaging practices, culturally sustaining pedagogies, asset-based approaches, dynamic assessment, metalinguistic awareness, and school–family partnerships, it becomes clear that these interconnected strategies provide powerful tools to support the complete development of multilingual learners. Despite challenges such as monolingual ideologies and structural barriers, these pedagogical models emphasize the value of students' linguistic and cultural repertoires as essential resources rather than deficits. Moving forward, constant efforts in teacher training, curriculum reform, and inclusive policy development will be important to realizing the full potential of these approaches. Lastly, advancing multilingual education is not only a pedagogical choice but also an ethical commitment to equity, belonging, and social justice in increasingly diverse classrooms. This review paper's generalizability is limited, as the findings may not apply to all regions or educational settings. Additionally, inconsistent implementation of these pedagogies across studies can affect the comparability and the reliability of the overall review.

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