



## Fostering Cognitive Flexibility and Critical Thinking through Multilingual Pedagogy in Teacher Education

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**Abstract:** *Substantial linguistic and cultural diversity increasingly characterises modern inclusive classrooms. In these changing situations, language should be a way to learn, not a barrier to equal learning. A traditional monolingual teaching framework often makes it hard for students to share complex ideas, draw on their own experiences, and really get into academic topics. On the other hand, validating students' linguistic identities and permitting the use of their native languages bolsters academic confidence and psychological safety. Therefore, it is important that teacher education programs include multilingual pedagogy. Teachers need to know how to use different languages to help students, not see them as a problem in the classroom. Multilingualism goes beyond just being able to talk to people; it is an important way to encourage critical and creative thinking. By examining alternative linguistic systems, learners enhance their cognitive flexibility, enabling them to interpret concepts from various epistemological perspectives, synthesise diverse meanings, and express innovative ideas. This review-based study examines how multilingual education in teacher preparation transcends the mere mitigation of language barriers. It asserts that employing children's complete linguistic repertoires actively promotes cognitive flexibility, emotional health, and holistic development. Classrooms can become powerful, culturally rich places where students think critically, express themselves creatively, and work together to learn by using a variety of languages.*

**Keywords:** *Multilingual pedagogy, Critical thinking, Creative thinking, Teacher education, Inclusive classrooms*

**Background of the Study:** Language is the structured way that people talk to each other in any social setting. Language is usually defined as a system of symbols used for communication, where different parts are put together and work together to convey meaning (Okal, 2014). The Latin words “multi” (many) and “lingua” (language) are where the word “multilingualism” comes from. It means that a person can speak more than one language, often with a level of fluency that is similar to that of a native speaker (Okal, 2014). Education is a basic part of society, and schools and the community have a two-way relationship, where schools not only teach languages but also reflect the linguistic diversity and values of the community. The

use of language and multilingualism in education depends on how people in society feel and what they value. The value of learning multiple languages makes it more likely that they will be included in the curriculum, which encourages multilingual education. However, if one language is deemed sufficient, other languages receive less attention, which can lead to a diminished appreciation for linguistic diversity and limit students' exposure to different cultures. Schools are shaped by their sociolinguistic context, but they also have a big effect on how people feel about multilingualism and cultural diversity (Cenoz & Gorter, 2010). The five "C" aim areas—Communication, Cultures, Connections, Comparisons, and Communities—show that language development happens outside of the classroom and is closely related to social interaction, cultural knowledge, and being involved in the community. When students speak their native languages, they can better share their cultural practices, connect what they learn in school to what they do in real life, compare different cultural and linguistic points of view, and have meaningful conversations with people in their communities. Local and regional languages are critical for sharing cultural knowledge and life experiences, so they are great for encouraging critical and creative thinking. India's educational policy has greatly recognised the importance of multilingualism. The National Education Policy (NEP), 2020, puts a lot of emphasis on encouraging multilingualism and keeping the diversity of Indian languages. The policy says that the language of instruction should be the child's home language, mother tongue, or a local or regional language until at least Class 5 and, if possible, until Class 8. It also encourages the use of Indian languages in both school and higher education so that students can learn in the languages that work best for them. Modern inclusive classrooms have many different languages spoken by the students. This means that students come from many different language backgrounds and bring various cultural and communicative experiences to the classroom. In these environments, language should function as a medium for understanding rather than a barrier to education. When education is exclusively conducted in a foreign language, many learners may encounter difficulties in articulating their thoughts, conveying their experiences, or comprehensively understanding academic subjects. Students naturally demonstrate increased confidence and comfort when allowed to communicate and reflect in their native languages, thereby promoting more active participation in the learning process. Recognising and valuing students' linguistic identities is essential for cultivating equitable and meaningful educational experiences. Multilingual pedagogy in teacher education is crucial in this situation. Teachers need to recognise linguistic diversity, use teaching methods that include everyone, and use many languages as learning tools. This strategy gets rid of things that make it hard to understand while also building learners' confidence, respect for other cultures, and interest in learning, ultimately fostering an inclusive environment that enhances educational outcomes for all students. By using multilingual practices in the classroom, students can learn more and grow as people because they can hear and see different languages and points of view.

### **Objectives of the Study:**

- To examine the importance of multilingualism in education, particularly in relation to students from diverse linguistic backgrounds.
- To analyze how multilingual pedagogy contributes to the development of critical thinking skills and enhances creative thinking among learners.
- To examine the role of teacher education programs in preparing teachers to implement multilingual strategies effectively.
- To identify the challenges and opportunities in implementing multilingual pedagogy in educational settings.

**Methodology of the Study:** This study utilises a review methodology, collecting, analysing, and evaluating relevant literature to clarify fundamental concepts, trends, and conclusions regarding multilingualism in education. The goal is to explain how multilingual teaching helps students' cognitive and creative growth.

The study's data were obtained from open-access academic journals, research articles, books, and official policy documents, including materials related to the National Education Policy (NEP), 2020. We used online academic databases like Google Scholar and a number of open educational resources to find relevant literature.

**Understanding Multilingual Pedagogy:** Multilingualism is common around the world, and schools are increasingly encouraging students to learn more than one language. Many programmes now teach students in their native language, as well as English and other languages from their region or from a minority group. Research indicates that multilingual learners utilise all their languages simultaneously (translanguaging), thereby enhancing communication and learning (Portoles & Marti, 2020). Nonetheless, pedagogical approaches often conform to a monolingual framework, treating languages in isolation and aiming for native-like proficiency. This approach ignores the benefits of speaking more than one language. As a result, teacher training must incorporate multilingual perspectives to empower educators to apply research-based methodologies, despite the enduring prevalence of traditional monolingual concepts that are difficult to modify (Portoles & Marti, 2020).

Understanding bilingual students and their families is the main goal of teacher training for multilingual settings. Teachers should carefully watch how their students are learning, know how their families and communities affect them, and learn about their students' languages and cultures. To grow and share this knowledge in the classroom, it's important to work with families (Garcia & Cleyn, 2013). Teachers need to help students understand the social and political contexts of linguistic variety. This includes their backgrounds, shared histories, language status, and experiences of unfairness. In light of this understanding, they should develop pedagogical strategies and curricula that reflect and address students' sociocultural contexts (Garcia & Cleyn, 2013).

**Role of Teacher Education in Multilingual Classrooms:** The convictions of educators significantly influence their pedagogical approaches, and they frequently resist altering these beliefs. Research indicates that numerous educators endorse the concept of multilingualism; nevertheless, they frequently fail to implement it in reality. Some contend that incorporating students' home languages in the classroom may impede the mastery of the primary language, leading to its avoidance (Jakisch, 2014). Research indicates ambivalence: language educators are more receptive to language comparison, yet they remain reluctant to consistently employ new languages or multilingual activities. Experienced teachers, those proficient in languages, or individuals from multilingual backgrounds typically possess a superior comprehension of concepts. Although educators typically regard multilingualism positively, they frequently lack the confidence or training to effectively implement it in the classroom. Crucial aspects, such as strategy dissemination and collaboration, remain under-researched (Haukas, 2016), which hinders the effective integration of multilingualism in educational practices and limits the potential benefits for both teachers and students. Ruiz contended that our comprehension of language influences our actions and the policies we formulate. He suggested perceiving language as a resource instead of a difficulty or merely a right, highlighting the significance of appreciating and fostering minority languages. This method may alleviate conflicts between communities that communicate in a predominant language and those that utilise a minority language. He contended against the prevailing notion that English speakers have to acquire additional languages while relinquishing their heritage languages. The research "A Nation at Risk" emphasised English and saw other languages as secondary, therefore neglecting students from varied linguistic origins. Ruiz proposed that language planning should consider minority communities as essential repositories of information and foster language growth. Internships within linguistic communities can enhance knowledge and contribute to the preservation of minority languages (Catalano, 2016). Research indicates that educators significantly influence the development of students' multilingual identities. Research indicates that identity-centred teaching enhances the self-esteem, emotional well-being, and self-perception of multilingual students, correlating with improved academic outcomes. Nevertheless, research on teachers' multilingual

identities is scarce. Evidence indicates that educators with personal multilingual experiences exhibit increased receptiveness to inclusive, multilingual teaching methods. This domain requires additional investigation (Moria & Fisher, 2025).

**Multilingual Pedagogy and Creative Thinking :** Multilingualism and intercultural experiences are positively associated with creativity, although the effects are modest. These elements are interrelated but each enhances creative capacity independently. Cognitive abilities, especially divergent thinking, enhance creativity; however, multilingualism does not exhibit a significant correlation with intelligence. People who are more open are also more likely to interact with languages and cultures, which makes it hard to tell what caused what. Whether diversity enhances creativity or creative individuals seek diverse experiences (Furst & Grin, 2023). Creative thinking includes coming up with new ideas, making connections, and saying things in ways that are different from how they are usually said. A multilingual education strategy can significantly enhance these skills by allowing learners to leverage diverse linguistic and cultural resources. Multilingual pedagogy fosters expansive thinking, distinctive connections, and varied problem-solving methodologies, rather than confining students to a singular language.

- ***Different Points of View:*** When students learn many languages, they are also learning about different ways of thinking and cultural frameworks. Each language contains unique meanings, expressions, and viewpoints. This helps learners understand concepts in different ways, compare ideas from different cultures, and develop a deeper, more flexible understanding, which is an important part of being creative (Kharkhurin et al., 2023).
- ***Flexible Speech:*** Multilingual students can use their preferred language to express their thoughts. This eases anxiety and cognitive barriers, enabling individuals to focus on uniqueness rather than mere correctness. As a result, kids are more likely to take risks, try out new ideas, and come up with creative answers in writing, speaking, or art (Gilmour, 2017).
- ***Collaborative Learning:*** In multilingual classrooms, group activities like translating, paraphrasing, or co-constructing meaning help students work together to figure things out. These interactions encourage creative problem-solving because students have to contemplate and rephrase ideas in different languages. When students work together, they can see things from their classmates' points of view, which helps them think more clearly.
- ***Cultural Creativity:*** Learning multiple languages helps students learn about a wide range of cultural traditions, stories, and forms of art. This diversity encourages new ideas in areas like writing, literature, acting, and the visual arts. Students can combine elements from different cultures to come up with new and creative ways to express themselves, which encourages innovation and creativity (Gardner-Chloros, 2014).

Multilingual education encourages language learning and a creative way of thinking by encouraging flexibility, different points of view, and meaningful interactions with ideas.

**Multilingual Pedagogy and Critical Thinking:** Critical thinking includes looking at information, judging arguments, and making reasonable decisions. Multilingual learning environments naturally cultivate these skills by encouraging learners to engage with concepts in various linguistic and cultural contexts. When students switch between languages, they do more than just translate; they think deeply about what they know, compare different points of view, and evaluate meanings.

- ***Comparative Analysis:*** When students learn more than one language, they have to compare words, structures, and meanings. This method improves analytical thinking by making students figure out how

things are alike and different, notice the small details, and understand how meaning changes from one situation to the next. This difference makes it easier for them to judge important information.

- **Better Understanding:** Let students talk about or analyse difficult ideas in a language they know better. This helps them connect with the material on a deeper level. This makes it easier to understand, think about things deliberately, and connect new information with what you already know. Multilingual discourse enhances conceptual clarity instead of limiting it.
- **Argumentation and Debate:** In multilingual classrooms, people can have deeper conversations and debates. Students can articulate their viewpoints more effectively when not restricted to a singular language, employing various linguistic resources to validate their assertions. This improves reasoning skills because students have to back up their points of view, talk to other people, and improve how they think.
- **Questioning and Inquiry:** When students hear different ways of saying things and see things from different cultures, they are more likely to question what they think they know and look for other ways to understand things. They become more open to uncertainty and more likely to look at different points of view, which is important for critical inquiry.

Teacher educators can improve these skills by giving students assignments that make them read literature in different languages, look at cultural settings, and contemplate different points of view. These kinds of activities help students go beyond simple understanding to develop thoughtful, well-reasoned points of view.

**Strategies for Implementing Multilingual Pedagogy in Teacher Education:** Teacher education institutions play a crucial role in preparing future educators to work effectively in linguistically diverse classrooms. By integrating multilingual pedagogy into training programmes, they can help teachers develop inclusive, flexible, and cognitively enriching teaching practices (Heffington & Coady, 2023). The following strategies can support this goal:

- **Translanguaging Activities:** Teacher educators can create assignments that require student teachers to work with content in more than one language. For example, they could read a text in one language and then talk or write about it in another. This helps future teachers understand how students use all of their language skills to make sense of things and helps them understand things better.
- **Multilingual Learning Resources:** Giving trainee teachers access to textbooks, research articles, and digital materials in more than one language helps them see things from different points of view. This also demonstrates how classroom materials can reflect linguistic diversity and benefit all students, particularly those who are multilingual.
- **Collaborative Projects:** Group work that brings together students with different linguistic and cultural backgrounds encourages knowledge sharing and peer learning. Such collaboration helps trainee teachers experience firsthand how multilingual interaction can enhance creativity, communication, and problem-solving.
- **Reflective Journals:** Encouraging trainee teachers to keep reflective journals helps them think critically about their ideas, experiences, and attitudes toward language diversity. This reflection is important for becoming more aware and questioning the biases that come from only speaking one language in the classroom.
- **Community Engagement:** Getting families and communities involved helps trainee teachers learn about the language skills of students outside of school. Things like visiting the community, doing interviews,

or working on language projects with family members help students connect what they learn in school to their lives and cultures.

These strategies provide future teachers the skills and knowledge they need to make classrooms that are welcoming to everyone. Teachers can help students learn and grow by valuing and using their language skills.

**Challenges in Implementing Multilingual Pedagogy:** Even though there are many beneficial things about using multilingual pedagogy in schools, it can be challenging to do. There are a number of structural and attitudinal barriers that can make it challenging to use it effectively:

- **Monolingual Educational Policies:** In many places, schools only teach one language, which is often considered the key to national unity or academic success. Such rules can discourage teachers from using more than one language in class.
- **Lack of Teacher Training:** Many teachers lack formal training in teaching multiple languages. Because of these issues, they might not feel ready or confident about how to handle classrooms with students from different language backgrounds or how to use methods like translanguaging well.
- **Limited Resources:** There aren't always enough teaching materials that are available in more than one language. This category includes textbooks, digital content, and tools for testing, which makes it hard for teachers to use multilingual resources in their lessons.
- **Attitudinal Barriers:** Some teachers and schools still think that using more than one language in the classroom might make it harder for students to learn the main language or confuse them. These beliefs can stop people from using research-backed and inclusive methods.

To get around these problems, teacher education programs need to give students the right training, encourage positive attitudes toward multilingualism, and make sure they have access to the right resources and institutional support.

**Conclusion:** Teaching in more than one language gives students a lot of chances to improve their creative and critical thinking skills. Teacher education programmes can help teachers create classrooms that are welcoming, dynamic, and intellectually stimulating by recognising language diversity as a valuable asset. By using strategies like translanguaging, collaborative learning, and multilingual resources, teachers can get students to look at ideas from different angles, think for themselves, and express their creativity. Integrating multilingual pedagogy into teacher education cultivates egalitarian, innovative, and reflective educational practices across diverse societies.

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