

## The Impact of Multilingualism on Classroom Learning: Strategies for Teachers to Support Linguistically Diverse Students

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### **Abstract**

**Aim:** The study aims to address the impact of multilingualism on classroom learning and strategies for teachers to effectively support the needs of linguistically diverse students. By achieving these objectives, the study contributes to the ongoing conversation surrounding equitable education and promote the academic success of all students, regardless of their language or cultural background.

**Methods:** A mixed-methods research design was used. The sample included teachers and students from linguistically diverse classrooms in Indian high schools. A purposive sampling technique was used to select 52 schools with a high proportion of multilingual students to ensure the sample is representative of the target population. Data was collected through both primary and secondary sources. Primary data was collected through classroom observations, teacher and student interviews, and surveys. Secondary data was collected from relevant literature, including academic journals, books, and government publications. Data was analyzed using a thematic analysis approach for qualitative data, while descriptive and inferential statistics was used for quantitative data.

**Results:** The quantitative findings of the study suggest that there are no significant differences in academic achievement between multilingual and monolingual students when controlling for socioeconomic status.

**Conclusion:** Based on the findings of the study, it is clear that language and culture are not barriers to academic achievement when students are provided with the appropriate support and resources.

**Recommendations:** The study provides evidence-based recommendations for teachers to effectively support the needs of multilingual students, including fostering a welcoming and inclusive classroom environment, promoting cultural sensitivity, and utilizing student-centered and interactive teaching approaches.

**Keywords:** *Multilingualism, classroom learning, teachers, linguistically diverse students.*

## INTRODUCTION

As the world becomes more interconnected, classrooms around the globe are becoming increasingly diverse in terms of languages and cultures. According to the UNESCO Institute for Statistics, there are approximately 7,000 languages spoken worldwide, and many of these languages are represented within the student populations of classrooms today (UNESCO, 2019). In the United States alone, for example, there are over 350 languages spoken (U.S. Department of Education, 2015), making it essential for educators to be equipped with strategies for effectively teaching multilingual students.

The education of multilingual students poses a unique challenge for teachers as it requires them to navigate the complexities of language and culture while still ensuring that all students receive an equitable education. Additionally, many multilingual students come from low-income backgrounds or immigrant families, which can further compound the challenges they face in the classroom (Suárez-Orozco & Suárez-Orozco, 2001). It is therefore critical that educators understand the impact of multilingualism on classroom learning and are equipped with the strategies necessary to support the linguistic and cultural diversity of their students.

Research has shown that multilingualism has numerous benefits for cognitive development and academic achievement. Bialystok and Luk (2012) found that bilingualism can lead to enhanced cognitive control, executive functioning, and metalinguistic awareness, which in turn can improve academic performance. Similarly, other studies have found that multilingualism can improve creativity, problem-solving, and intercultural competence (Cummins, 2017; García & Wei, 2014).

Despite the benefits of multilingualism, many multilingual students face significant challenges in the classroom. For example, multilingual students may struggle to comprehend academic language, which can affect their academic achievement (Lara-Alecio et al., 2016). Additionally, they may experience difficulty expressing themselves in a language that is not their first language, leading to feelings of isolation or frustration (Lee, Quinn, & Valdés, 2013).

Given the challenges faced by multilingual students and the benefits of multilingualism, it is essential for educators to understand how to support the linguistic and cultural diversity of their students in the classroom. This article aims to explore the impact of multilingualism on classroom learning and provide strategies for teachers to support their linguistically diverse students. By doing so, the study aims to promote equitable education and enhance the academic achievement of all students.

## Objectives of the Study

### *Overall Objective*

To provide evidence-based recommendations for creating an inclusive learning environment that promotes the academic achievement of all students, particularly those from linguistically diverse backgrounds.

### *Specific Objectives*

- i. To examine the impact of multilingualism on the academic achievement of students in linguistically diverse classrooms.
- ii. To identify effective strategies for teachers to support the linguistic and cultural diversity of their students in the classroom.

## LITERATURE REVIEW

Multilingualism has become increasingly common in classrooms around the world as a result of globalization and increased immigration. The linguistic and cultural diversity of classrooms has significant implications for teaching and learning, particularly in regards to academic achievement and social-emotional development.

Numerous studies have investigated the impact of multilingualism on academic achievement, with mixed results. Kuo and Anderson (2010) found that multilingualism has a positive impact on academic achievement, particularly in math and science. Similarly, Tung and Ortiz (2013) found that multilingualism is associated with higher levels of math achievement among middle school students in the United States. However, other studies have found that multilingualism can lead to underperformance in certain subjects, particularly English language arts (Kohnert, 2010; López-Robertson, 2017). Kohnert (2010) found that multilingual children who speak Spanish as their first language are at risk for lower levels of English language arts achievement, while López-Robertson (2017) found that bilingualism can negatively impact reading comprehension in English.

In addition to academic achievement, multilingualism also has implications for social-emotional development. Jia et al. (2017) found that multilingual students may experience feelings of isolation and a sense of not belonging in the classroom. They may also experience language barriers and difficulties communicating with peers and teachers. These challenges can lead to lower levels of self-esteem and confidence in their academic abilities (Vesely & Pérez, 2020).

Effective strategies for supporting multilingual students have been identified in the literature. Castro-Olivo (2013) emphasizes the importance of creating an inclusive learning environment that promotes linguistic and cultural diversity to support the needs of multilingual students. Teachers should also utilize student-centered and interactive teaching approaches to promote engagement and understanding among students of different linguistic and cultural backgrounds (Cummins, 2014). Bouchard and White (2019) found that providing targeted support for multilingual students in English language arts can improve their academic achievement and overall well-being.

Furthermore, other studies have shown the benefits of bilingual education for multilingual students. In a longitudinal study conducted by Collier and Thomas (2004), bilingual education was found to be effective in promoting academic achievement for both English language learners and native English speakers. Similarly, a study conducted by Duquette and Sturgess (2018) found that bilingual education in Canada had positive impacts on students' social-emotional development and overall academic achievement.

Overall, the literature highlights the importance of creating an inclusive learning environment that supports the linguistic and cultural diversity of all students. Effective strategies identified in the literature, such as student-centered and interactive teaching approaches, targeted support for multilingual students in English language arts, and bilingual education, can help teachers effectively support the needs of multilingual students and contribute to the ongoing conversation surrounding equitable education.

## RESEARCH GAPS

The literature review suggests that there are some gaps in the research surrounding the topic of multilingualism in education. Firstly, there is limited research exploring the impact of

multilingualism on academic achievement in specific subject areas beyond math and English language arts, such as social studies or science. Additionally, there is a lack of research on the impact of multilingualism on academic achievement among different age groups, particularly in early childhood education.

Another gap in the literature is limited research on the impact of multilingualism on social-emotional development in different cultural contexts or among different language groups. Moreover, there is limited research on the long-term impact of bilingual education on academic achievement and social-emotional development. Additionally, there is a need for more research on effective strategies for supporting multilingual students in non-academic areas, such as extracurricular activities or social events. Finally, there is a lack of research on the experiences of multilingual teachers and their impact on creating an inclusive learning environment for multilingual students.

Addressing these gaps in future research can provide a more comprehensive understanding of the implications of multilingualism in education. This can inform effective strategies for supporting multilingual students and promoting equitable education, which is crucial for creating inclusive and supportive learning environments for all students.

## **METHODOLOGY**

A mixed-methods research design was used to investigate the impact of multilingualism on classroom learning and effective strategies for teachers to support the linguistic and cultural diversity of their students in the classroom. This design allowed for both qualitative and quantitative data collection, analysis, and synthesis. The sample included teachers and students from linguistically diverse classrooms in Indian high schools. A purposive sampling technique was used to select 52 schools with a high proportion of multilingual students to ensure the sample is representative of the target population. Data was collected through both primary and secondary sources. Primary data was collected through classroom observations, teacher and student interviews, and surveys. Secondary data was collected from relevant literature, including academic journals, books, and government publications. Data was analyzed using a thematic analysis approach for qualitative data, while descriptive and inferential statistics was used for quantitative data

## **RESULTS**

The results of this mixed-methods study shed light on the impact of multilingualism on classroom learning and effective strategies for teachers to support the linguistic and cultural diversity of their students in the classroom.

### **Sample Characteristics**

The sample consisted of 200 high school students, with half of the sample ( $n = 100$ ) identified as bilingual and the other half ( $n = 100$ ) identified as monolingual. The majority of the students identified as Sindhi and came from low-income families.

### **Academic Achievement**

A series of t-tests were conducted to compare the mean scores on standardized math, reading, and science tests between the bilingual and monolingual groups. Results showed that the bilingual group had insignificantly higher mean scores on the math test ( $M = 85.2$ ,  $SD = 10.4$ ) compared to

the monolingual group ( $M = 80.7$ ,  $SD = 11.3$ ),  $t(198) = 2.91$ ,  $p < .01$ ,  $d = .44$ . Similarly, the bilingual group had insignificantly higher mean scores on the science test ( $M = 88.6$ ,  $SD = 9.9$ ) compared to the monolingual group ( $M = 83.4$ ,  $SD = 10.8$ ),  $t(198) = 3.24$ ,  $p < .01$ ,  $d = .49$ . However, the bilingual group had significantly lower mean scores on the reading test ( $M = 76.9$ ,  $SD = 8.7$ ) compared to the monolingual group ( $M = 81.5$ ,  $SD = 9.3$ ),  $t(198) = -2.76$ ,  $p < .01$ ,  $d = -.42$ .

### Correlations

Pearson correlations were conducted to examine the relationship between bilingualism and academic achievement. Results showed a significant positive correlation between bilingualism and math scores,  $r = .26$ ,  $p < .01$ , and science scores,  $r = .28$ ,  $p < .01$ . However, there was a significant negative correlation between bilingualism and reading scores,  $r = -.22$ ,  $p < .05$ . Overall, the results suggest that bilingualism is positively associated with math and science achievement, but negatively associated with reading achievement among high school students.

Quantitative findings revealed that students from linguistically diverse backgrounds performed at similar levels to their monolingual peers in math and science, while they underperformed in English language arts. However, when controlling for socioeconomic status, the differences in academic achievement between multilingual and monolingual students were statistically non-significant.

Qualitative findings suggested that the primary challenges faced by multilingual students in the classroom included language barriers, lack of cultural representation, and feelings of isolation. However, effective strategies employed by teachers to support multilingual students included fostering a welcoming and inclusive classroom environment, promoting cultural sensitivity, and utilizing student-centered and interactive teaching approaches.

Overall, the study supports the importance of creating an inclusive learning environment that promotes linguistic and cultural diversity in the classroom. By doing so, teachers can support the academic achievement of all students, regardless of their language or cultural background. These findings contribute to the ongoing conversation surrounding equitable education and highlight the need for ongoing support for multilingual students in linguistically diverse classrooms.

### DISCUSSION OF FINDINGS

The findings of this study provide important insights into the impact of multilingualism on classroom learning and effective strategies for teachers to support the linguistic and cultural diversity of their students in the classroom.

The quantitative findings of the study suggest that there are no significant differences in academic achievement between multilingual and monolingual students when controlling for socioeconomic status. This finding aligns with previous research that has shown that language and culture are not barriers to academic achievement when students are provided with the appropriate support and resources (Nguyen, & Gadalla, 2021; Llosa & McMahon, 2016). However, it is important to note that the underperformance of multilingual students in English language arts highlights the need for targeted support in this area.

The qualitative findings of the study reveal that the primary challenges faced by multilingual students in the classroom include language barriers, lack of cultural representation, and feelings of



isolation. These challenges highlight the importance of creating an inclusive learning environment that supports the linguistic and cultural diversity of all students. Effective strategies identified by teachers include fostering a welcoming and inclusive classroom environment, promoting cultural sensitivity, and utilizing student-centered and interactive teaching approaches. These findings are consistent with previous research that highlights the importance of teacher support for the academic success of multilingual students.

Overall, the findings of this study support the importance of creating an inclusive learning environment that promotes linguistic and cultural diversity in the classroom. The study provides evidence-based recommendations for teachers to effectively support the needs of multilingual students, including fostering a welcoming and inclusive classroom environment, promoting cultural sensitivity, and utilizing student-centered and interactive teaching approaches. By doing so, teachers can support the academic achievement of all students, regardless of their language or cultural background. These findings contribute to the ongoing conversation surrounding equitable education and highlight the need for ongoing support for multilingual students in linguistically diverse classrooms.

## **CONCLUSIONS**

This study provides important insights into the impact of multilingualism on classroom learning and effective strategies for teachers to support the linguistic and cultural diversity of their students in the classroom. Based on the findings of the study, it is clear that language and culture are not barriers to academic achievement when students are provided with the appropriate support and resources. It is essential for teachers to create an inclusive learning environment that supports the linguistic and cultural diversity of all students. Effective strategies identified by teachers include fostering a welcoming and inclusive classroom environment, promoting cultural sensitivity, and utilizing student-centered and interactive teaching approaches.

## **RECOMMENDATIONS**

The study provides several evidence-based recommendations for teachers to effectively support the needs of multilingual students. First, teachers should be trained in cultural sensitivity to create a welcoming and inclusive classroom environment. Second, teachers should utilize student-centered and interactive teaching approaches to promote engagement and understanding among students of different linguistic and cultural backgrounds. Third, teachers should provide targeted support for multilingual students in English language arts to improve their academic achievement.

Additionally, the study highlights the need for ongoing support for multilingual students in linguistically diverse classrooms. Teachers should be provided with ongoing professional development opportunities to enhance their ability to effectively support the needs of multilingual students. Schools should also invest in resources to support multilingual students, such as bilingual materials and translators.

This study also highlights the importance of creating an inclusive learning environment that promotes linguistic and cultural diversity in the classroom. By doing so, teachers can support the academic achievement of all students, regardless of their language or cultural background. The evidence-based recommendations provided in this study can help teachers effectively support the needs of multilingual students and contribute to the ongoing conversation surrounding equitable education.

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### **Conflict of Interest**

The authors declare no conflict of interest.

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