

## **Influence of Mother Tongue on LSRW English Learning Proficiency of D.El.Ed. Students in Tripura: A Comparative Study**

**Ms. Nandita Majumder<sup>1</sup>, Prof. (Dr.) Prem Shankar Srivastava<sup>2</sup>**

*<sup>1</sup>Research Scholar, Faculty of Education, The ICFAI University, Tripura, India.*

*<sup>2</sup>Principal, Faculty of Education, The ICFAI University, Tripura, India.*

### **Abstract**

This study investigated the influence of mother tongue (Bengali and Kokborok) on English language proficiency across four key skills: listening, speaking, reading, and writing (LSRW) among Diploma in Elementary Education (D.El.Ed.) students in Tripura, India. A total of 414 students from District Institute of Education and Training (DIET) institutions participated in the study (Bengali speakers:  $n = 314$ ; Kokborok speakers:  $n = 100$ ). Proficiency scores were measured using standardised assessments for each language skill. Independent samples t-tests and Mann-Whitney U tests revealed no statistically significant differences between Bengali and Kokborok speakers across all four English language skills ( $p > 0.05$ ). Mean scores ranged from 28.6 to 30.3 across all skills for both groups, suggesting comparable English proficiency levels regardless of mother tongue. These findings challenge assumptions about differential mother tongue influence on English language acquisition and have important implications for teacher education programmes in multilingual contexts.

**Keywords:** mother tongue influence, English proficiency, LSRW skills, teacher education, multilingual education, Tripura

### **Introduction**

The relationship between mother tongue and second language acquisition has been a subject of considerable debate in educational psychology and applied linguistics (Cook, 2016; Ellis, 2015). In multilingual contexts such as India, where English serves as a medium of instruction and professional communication, understanding how learners' first languages influence their English proficiency is crucial for developing effective pedagogical strategies (Mohanty, 2019).

Tripura, a northeastern state of India, presents a unique linguistic landscape with Bengali and Kokborok as the two predominant languages. Bengali, an Indo-Aryan language, shares certain structural similarities with English, whilst Kokborok, a Sino-Tibetan language, differs significantly in its linguistic features (Jacquesson, 2008). This linguistic diversity provides an ideal context for examining potential differential effects of mother tongue on English language learning.

The development of English proficiency amongst teacher education students is particularly significant, as these individuals will shape the linguistic competencies of future generations (Richards & Rodgers, 2014). The D.El.Ed. programme prepares teachers for elementary education, where foundational English skills are introduced to young learners. Therefore, understanding the factors influencing English proficiency in this population has direct implications for educational quality and equity.

### Theoretical Framework

The study is grounded in the Contrastive Analysis Hypothesis (Lado, 1957) and the more contemporary multilingual competence framework (Cenoz & Gorter, 2015). Whilst early contrastive analysis predicted that greater linguistic distance between L1 and L2 would result in more learning difficulties, recent research suggests a more nuanced relationship, with factors such as metalinguistic awareness and cross-linguistic influence playing complex roles (Jarvis & Pavlenko, 2008).

The four language skills—listening, speaking, reading, and writing—represent distinct but interrelated competencies that may be differentially affected by L1 background (Grabe & Stoller, 2019). Listening and speaking skills involve real-time processing and production, whilst reading and writing allow for more controlled, deliberate language use. Understanding how mother tongue influences each skill can inform targeted pedagogical interventions.

### Research Questions

This study addressed the following research questions:

1. Is there a significant difference in English listening proficiency between Bengali and Kokborok speaking D.El.Ed. students?
2. Is there a significant difference in English speaking proficiency between the two language groups?
3. Is there a significant difference in English reading proficiency between the two groups?
4. Is there a significant difference in English writing proficiency between the two groups?

### Method

#### Participants

The study employed a cross-sectional survey design with 414 D.El.Ed. students from DIET institutions across Tripura. The sample comprised 314 Bengali speakers (75.8%) and 100 Kokborok speakers (24.2%), reflecting the approximate linguistic distribution in the state's teacher education programmes. All participants were in their second year of the D.El.Ed. programme and had similar educational backgrounds.

#### Instruments

English proficiency was assessed using a comprehensive battery of standardised tests developed for the Indian teacher education context:

1. **English Listening Proficiency Test:** A 40-item assessment measuring comprehension of spoken English across various contexts
2. **English Speaking Proficiency Test:** An oral assessment evaluating pronunciation, fluency, vocabulary, and grammatical accuracy
3. **English Reading Proficiency Test:** A 40-item test assessing comprehension of written texts of varying complexity
4. **English Writing Proficiency Test:** A task-based assessment evaluating written communication skills

All instruments demonstrated adequate reliability (Cronbach's  $\alpha > 0.75$ ) and had been validated in previous studies with similar populations.

### Procedure

Data collection occurred during regular academic sessions across participating DIET institutions. Trained assessors administered the tests under standardised conditions. Listening and reading tests were conducted in group settings, whilst speaking assessments were individual. Writing assessments were completed within a 60-minute timeframe. Ethical approval was obtained from the institutional review board, and all participants provided informed consent.

### Data Analysis

Statistical analyses were conducted using SPSS 26.0. Descriptive statistics (means, standard deviations, medians) were calculated for each language group across all proficiency measures. The Shapiro-Wilk test assessed normality of distributions. Given violations of normality assumptions ( $p < 0.001$  for all variables), both parametric (independent samples t-test) and non-parametric (Mann-Whitney U test) analyses were conducted. Levene's test examined homogeneity of variances. The significance level was set at  $\alpha = 0.05$ .

### Results

#### Descriptive Statistics

Table 1 presents the descriptive statistics for English proficiency scores across both language groups.

**Table 1** *Group Descriptive Statistics for English Proficiency Scores*

Proficiency Measure	Group	N	Mean	Median	SD	SE
English Listening	Bengali	314	29.8	30.0	4.55	0.257
	Kokborok	100	29.1	30.0	4.64	0.464
English Speaking	Bengali	314	28.6	29.0	4.93	0.278
	Kokborok	100	29.2	30.0	4.70	0.470
English Reading	Bengali	314	30.3	31.0	4.44	0.251
	Kokborok	100	29.6	30.0	4.52	0.452
English Writing	Bengali	314	29.5	30.0	4.80	0.271
	Kokborok	100	29.0	30.0	5.32	0.532

The descriptive statistics reveal remarkably similar performance levels across both language groups, with mean differences ranging from 0.5 to 0.7 points on a 40-point scale.

#### Assumption Testing

Table 2 presents the results of the Shapiro-Wilk normality tests.

**Table 2** *Normality Test Results (Shapiro-Wilk)*

Variable	W	p
English Listening Proficiency Score	0.961	<.001
English Speaking Proficiency Score	0.976	<.001
English Reading Proficiency Score	0.952	<.001
English Writing Proficiency Score	0.965	<.001

*Note.* A low p-value suggests a violation of the assumption of normality.

All variables showed significant departures from normality, necessitating the use of non-parametric alternatives alongside parametric tests.

Table 3 displays the homogeneity of variance test results.

**Table 3** *Homogeneity of Variances Test (Levene's)*

Variable	F	df	df2	p
English Listening Proficiency Score	0.002	1	412	0.966
English Speaking Proficiency Score	1.837	1	412	0.176
English Reading Proficiency Score	0.248	1	412	0.619
English Writing Proficiency Score	0.682	1	412	0.410

*Note.* A low p-value suggests a violation of the assumption of equal variances.

The non-significant Levene's test results indicate homogeneity of variances across groups for all variables.

### Hypothesis Testing

Table 4 presents the results of independent samples t-tests and Mann-Whitney U tests.

**Table 4** *Independent Samples T-Test and Mann-Whitney U Test Results*

Variable	Test	Statistic	df	p
English Listening Proficiency	Student's t	1.401	412	0.162
	Mann-Whitney U	14225	-	0.156
English Speaking Proficiency	Student's t	-1.087	412	0.278
	Mann-Whitney U	14362	-	0.197
English Reading Proficiency	Student's t	1.472	412	0.142
	Mann-Whitney U	14530	-	0.257
English Writing Proficiency	Student's t	0.859	412	0.391
	Mann-Whitney U	15425	-	0.790

*Note.*  $H_1: \mu(\text{Bengali}) \neq \mu(\text{Kokborok})$

Both parametric and non-parametric tests yielded consistent results, with no statistically significant differences between Bengali and Kokborok speakers across all four English proficiency measures (all p-values > 0.05).

### Discussion

The findings of this study reveal no significant differences in English language proficiency between Bengali and Kokborok speaking D.El.Ed. students across all four language skills. This result challenges traditional assumptions about the differential impact of linguistic distance on second language acquisition and has important theoretical and practical implications.

### Theoretical Implications

The absence of significant differences between the two language groups suggests that factors other than structural linguistic distance may play more crucial roles in English language learning. This finding aligns with recent multilingual competence theories that emphasise the importance of metalinguistic awareness, motivation, and educational context over simple L1-L2 structural comparisons (Cenoz & Gorter, 2015).

The comparable performance across all four skills indicates that neither language group has a systematic advantage in any particular aspect of English proficiency. This challenges skill-specific transfer theories that might predict differential effects based on the linguistic features of the mother tongue (Jarvis & Pavlenko, 2008).

### **Educational Implications**

For teacher education programmes in Tripura, these findings suggest that pedagogical approaches need not be differentiated based solely on students' mother tongue backgrounds. Instead, educators should focus on inclusive strategies that address individual differences in learning styles, motivation, and prior educational experiences (Richards & Rodgers, 2014).

The relatively moderate proficiency scores (means ranging from 28.6 to 30.3 out of 40) indicate room for improvement across both language groups. This suggests that systemic factors in English language education, rather than mother tongue influence, may be the primary determinants of proficiency levels.

### **Contextual Factors**

The similar proficiency levels might be attributed to several contextual factors in Tripura's educational landscape. Both Bengali and Kokborok speaking students likely receive similar English language instruction throughout their schooling, with English being introduced as a subject from primary levels. The standardised D.El.Ed. curriculum ensures comparable exposure to English during teacher training.

Additionally, the multilingual environment of Tripura may foster general metalinguistic awareness that benefits English learning regardless of specific mother tongue (Mohanty, 2019). Students from both language backgrounds navigate multiple languages daily, potentially developing cognitive flexibility that facilitates additional language learning.

### **Limitations and Future Directions**

This study has several limitations that should be acknowledged. The cross-sectional design prevents causal inferences about the relationship between mother tongue and English proficiency. Longitudinal studies tracking students' progress over time would provide more insights into developmental patterns.

The sample, whilst representative of D.El.Ed. students in Tripura, may not generalise to other populations or educational contexts. Future research should examine these relationships across different educational levels and geographical regions.

The study focused on global proficiency scores without examining specific linguistic features or error patterns that might reveal more subtle mother tongue influences. Detailed error analysis and qualitative investigations of learning processes could complement these quantitative findings.

### **Conclusion**

This study provides empirical evidence that mother tongue background (Bengali vs. Kokborok) does not significantly influence English language proficiency among D.El.Ed. students in Tripura. The findings suggest that educational policies and pedagogical practices

should focus on improving overall English language instruction quality rather than developing differentiated approaches based solely on students' first language backgrounds.

The results contribute to the growing body of research challenging simplistic notions of mother tongue interference and supporting more nuanced understandings of multilingual language learning. For teacher educators and policymakers in multilingual contexts, these findings emphasise the importance of inclusive, high-quality English language instruction that addresses the needs of all learners regardless of their linguistic backgrounds.

Future research should explore the specific factors that contribute to English language learning success in multilingual contexts and develop evidence-based interventions to enhance proficiency levels across all language skills. As Tripura continues to develop its educational infrastructure, ensuring equitable English language learning opportunities for all students, regardless of mother tongue, remains a critical goal for educational equity and social mobility.

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