



The Effectiveness of a Multilingual Cognitive Approach in English Language Teaching

Mrs. S. Swapna

Research Scholar, Department of English, Koneru Lakshmaiah Education Foundation,
Vaddeswaram, A.P., India-522502. & Assistant Professor of English, Malla Reddy College of Engineering and Technology, Hyderabad, India.

Abstract- This paper explores the effectiveness of a multilingual cognitive approach in enhancing English language acquisition among second-language learners. Drawing from cognitive psychology and multilingual pedagogy, this study investigates whether incorporating learners' first and second languages can support vocabulary retention, reading comprehension, and critical thinking in English. A quasi-experimental study involving two groups of undergraduates was conducted, with one group receiving multilingual cognitive support and the other taught using monolingual English methods. Results suggest that the multilingual cognitive group significantly outperformed the control group in both vocabulary tests and critical reading tasks. The findings reinforce the relevance of multilingualism in ELT and call for a pedagogical shift towards recognizing the cognitive advantages of multilingual learners.

Keywords: Multilingualism, cognitive approach, ELT, metalinguistic awareness, language transfer, second language acquisition.

I. Introduction

In the context of global English language education, especially in linguistically diverse nations like India, the dominance of monolingual English instruction often marginalizes the linguistic resources students already possess. English Language Teaching (ELT) continues to operate on the assumption that immersion and monolingual input produce better outcomes. However, recent developments in cognitive science and multilingual education challenge this assumption.

The multilingual cognitive approach suggests that the brain processes multiple languages not in isolation but in an interconnected network, enabling transfer of cognitive and linguistic skills across languages. This study examines whether a multilingual cognitive approach in ELT can enhance English vocabulary acquisition, reading comprehension, and critical thinking in multilingual undergraduate learners.

II. Literature Review

Multilingualism and Language Learning

Multilingualism refers to the ability to use two or more languages proficiently. According to Cummins (1979), cognitive-academic language proficiency can transfer from one language to another, enabling learners to use knowledge from L1 or L2 while acquiring L3 (in this case, English). This theory, known as *Common Underlying



Proficiency*, implies that promoting multilingualism can accelerate English acquisition.

Cognitive Processing in Language Acquisition

From a cognitive perspective, language learning involves working memory, executive function, and metacognitive awareness. Bialystok (2001) and other scholars have shown that multilinguals exhibit enhanced cognitive control and attentional flexibility, allowing them to switch between linguistic codes and apply known language rules to new learning contexts.

Language Transfer and Metalinguistic Awareness

Language transfer—both positive and negative—occurs when knowledge of one language affects learning in another. For example, similarities in vocabulary or syntax can facilitate learning, whereas false cognates may hinder it. Metalinguistic awareness, the ability to reflect on language as a system, is crucial for learners to navigate such complexities (Jessner, 2006). Multilingual approaches encourage learners to analyze and compare languages, deepening their understanding of linguistic structures.

Empirical Gaps

Despite the growing interest in multilingual education, empirical studies that combine *cognitive theories with multilingual pedagogy in the ELT classroom remain limited. Particularly, few studies focus on Indian undergraduate learners who often speak 2–4 languages but are still taught English monolingually.

III. Methodology

Research Questions

Does a multilingual cognitive approach improve English vocabulary retention in multilingual learners?

Does it enhance reading comprehension and critical thinking skills?

Participants

Sixty undergraduate students (ages 18–21) from a semi-urban college in Telangana, India, participated in the study. All were proficient in Telugu (L1), and either Hindi or Urdu (L2), with English (L3) being their language of instruction.

Experimental Group (N=30): Received multilingual cognitive instruction.

Control Group (N=30): Received monolingual English instruction.

Instruments

Vocabulary Retention Test (20 words weekly, both immediate and delayed recall)

Reading Comprehension Tasks (short critical essays)

Think-Aloud Protocols (to assess metalinguistic awareness)

Observation and Field Notes

Procedure

The intervention lasted six weeks, with three 60-minute classes per week.



Experimental Group Instruction:

Code-switching was allowed.

Vocabulary taught using translation and etymological links (e.g., "respect" linked to similar Hindi/Urdu/Telugu terms).

Learners encouraged paraphrasing texts in L1/L2 before rephrasing in English.

Critical reading done through multilingual discussion and comparative analysis.

Control Group Instruction:

Only English used.

Traditional ELT methods applied (rote vocabulary, comprehension questions, individual reading).

Data Analysis

Quantitative data from vocabulary and comprehension tests were analyzed using independent-sample t-tests. Qualitative data from think-alouds and field notes were coded thematically.

IV. Results

Vocabulary Retention

Group	Immediate Recall (%)	Delayed Recall (%)
Experimental	87.3	82.6
Control	73.2	61.8

T-tests showed statistically significant differences ($p < 0.01$) favoring the experimental group for both immediate and delayed recall.

Reading Comprehension Scores

Group	Mean Score (out of 20)
Experimental	16.8
Control	13.2

Again, results showed significance at $p < 0.05$, indicating improved comprehension for the multilingual group.

Think-Aloud Insights

Students in the multilingual group:

Frequently used L1 to decode complex English sentences

Noted grammar similarities and differences

Reported higher confidence and reduced anxiety

V. Discussion

The findings support the hypothesis that a multilingual cognitive approach enhances both vocabulary retention and reading comprehension. Drawing from Cummins'



(2000) interdependence hypothesis, the results indicate that cognitive and linguistic skills are not siloed by language but shared across the learner's linguistic repertoire.

The higher retention of vocabulary is likely due to deeper semantic encoding through translation and connection-building. The improved comprehension scores and critical thinking can be attributed to learners' ability to engage in contrastive analysis—a cognitive strategy facilitated by multilingualism.

The qualitative data suggest that allowing students to "think in multiple languages" helped reduce cognitive load, enabling better problem-solving and reasoning in English.

These findings echo Bialystok (2001) and García & Wei (2014), who emphasized the cognitive and affective benefits of translanguaging—the dynamic use of a learner's full linguistic repertoire.

VI. Conclusion

This study highlights the cognitive and pedagogical value of a multilingual approach in ELT. Rather than enforcing monolingual norms, educators should leverage learners' existing linguistic knowledge to enhance English proficiency. In multilingual societies like India, acknowledging and integrating all the languages a learner speaks is not only inclusive but cognitively strategic.

Pedagogical Implications

ELT curriculum should incorporate multilingual strategies like contrastive grammar, translation-based tasks, and cross-linguistic reading.

Teacher training must include cognitive linguistics and multilingual education modules.

Assessment should recognize multilingual processing strategies, not penalize them.

Limitations

Short intervention period (6 weeks)

Limited to reading and vocabulary; other skills not tested

Context-specific (semi-urban Indian classroom)

Recommendations for Future Research

Longitudinal studies across rural/urban divides

Multilingual approaches in writing and speaking instruction

Impact of translanguaging on learner identity and motivation

References

1. Bialystok, E. (2001). *Bilingualism in development: Language, literacy, and cognition*. Cambridge University Press.
2. Cummins, J. (1979). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question and some other matters. *Working Papers on Bilingualism*, (19), 121–129.



3. Cummins, J. (2000). Language, power and pedagogy: Bilingual children in the crossfire. *Multilingual Matters*.
4. García, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism and education*. Palgrave Macmillan.
5. Jessner, U. (2006). *Linguistic awareness in multilinguals: English as a third language*. Edinburgh University Press.