

A Comparative Study on Academic Achievement of Using English and Adi Mother Tongue as Medium of Instruction in English Language Teaching

Dr. Dinachandra Singh Chingakham^{1*} and Miti Pabin²

Department of Education, Arunachal University of Studies, Namsai Arunachal Pradesh, India-792103.

Abstract

The importance of English language skills is one of the emphases given among school students. The present study was quasi-experimental research conducted in Arunachal Pradesh India. The population of the study was secondary school students. Fifty students (N=50) to part in the experimental teaching of the English language using English as the medium of instruction and Adi mother tongue as the medium of instruction. English as a medium of instruction is based on a direct method of language teaching, and Adi language as the medium of instruction was based on the grammar-translation method. A paired t-test was conducted to compare the effectiveness of using English and the mother tongue (Adi). The finding showed that the grammar-translation method using the mother tongue (Adi language) was more effective than using English as the medium of instruction with $p < .005$. The findings of the study could be useful for language teachers for effective English teaching among second-language English learners.

Keywords: English, grammar translation, direct method, achievement scores

¹ *Dr. Dinachandra Singh Chingakham is associate professor and head of the Department of Education, Arunachal University of Studies, Namsai Arunachal Pradesh.

² Miti Pabin TGT (English) at Government secondary school, Kebang(Pangin block), Siang District, Arunachal Pradesh. Pin Code 791103. She is an M.Ed student at Arunachal University of Studies, Namsai.

Introduction

English has emerged as a crucial international language, often regarded as a key to unlocking global success. Consequently, many non-English-speaking countries have adopted English as a medium of instruction in academic institutions. The use of a language other than the mother tongue in education is common, particularly in tertiary education, reflecting the increasing international mobility of students.

Students in Government Secondary School, Kebang, specifically those in classes V, VII, IX, and X, face challenges in English language communication due to many coming from rural backgrounds. In this school, the predominant mother tongue is Adi, spoken by the Adi tribes in the region. Communication issues arise when teachers use English as the medium of instruction, complicating understanding for the learners.

To address this complexity, the researchers employed an experimental approach using L1 and L2 (L1 - mother tongue, L2 - second language) to determine the most effective medium of instruction for students in classes V, VII, IX, and X at Government Secondary School, Kebang, Siang district, Arunachal Pradesh.

Alieto (2018) emphasizes that the success of education depends significantly on the chosen language as the medium of instruction, especially in early education. Therefore, the critical decision of the language of instruction should be made after thorough analysis. This perspective aligns with Ejieh's (2004) assertion that the language of instruction policy is a crucial concern. Supporting this viewpoint, Perez and Alieto (2018) argue that the chosen language of instruction can lead to either educational success or failure.

In the current study, the researchers questioned whether Adi students, not proficient in English, could acquire knowledge when studying subjects in English. This led to a comparison of students' achievement scores when learning through English and Adi mother tongue as the medium of instruction.

Background of the study

The concept of English as a medium of instruction refers to the utilization of the English language for teaching academic subjects in educational institutions located in countries where English is not the primary language (Dearden, 2014). The practice of English medium of instruction is frequently employed for teaching various subjects. In this context, Sah (2020) defines English Medium Instruction (EMI) as "an instructional approach that involves teaching non-English academic subjects in English within educational settings where English is not the first language of the majority of students. The goal is to facilitate the acquisition of both content knowledge and English language skills" (p. 1).

The background of the study of the Siang district

Siang district is the 21st district of Arunachal Pradesh state. The district was created in 2015 by carving it out of the west Siang and east Siang districts of Arunachal Pradesh. It includes the legislative assembly constituencies, 32-Rumgong and 35-Pangin-boleng. The headquarters of the Siang district is Boleng. The district is derived from the mighty Brahmaputra River, which in Arunachal is known as the Siang River. It is predominantly inhabited by the Adi tribe of Arunachal Pradesh and the language spoken by Adi. Geographically, the Siang district is located almost in the centre of the Siang belt of Arunachal Pradesh. The total area of Siang district is 2,919 km (1,127 sq mi) and the total population (2011) was 31,920. Siang district is also known for Mouling National Wildlife Sanctuary, it was established in 1982 to create a favourable habitat for plants and animals, located on the right bank of river Siang covering an area of 483 sq. km.

Statement of the problem

Students of Government Secondary School, Kebang Arunachal Pradesh of class V, VII, IX and X students are very poor in the English language because most of the students come from village areas where there is no network or facilities. The teacher tried to correct the language to teach, but the students were very shy to speak English and they always replied in their mother tongue. Mother tongues are commonly used in government schools. Only a few students in Government Secondary School, Kebang could communicate in English. The teachers are forcefully trying to use English thinking it might help to improve students' English communication skills. In this study, the researchers were trying to understand a more effective medium of instruction between English and the mother tongue of the students.

Objective

To find out a more effective medium of instruction between English and Adi mother tongue in teaching English

Literature review**Theoretical background**

The medium of instructional language became a matter of discussion in teaching English as a second language or foreign language. From the ground of the instructional language of the teacher, two distinctive teaching methods came up. They are the Grammar Translation Method and the Direct Method.

In teaching English as a second language or foreign language, teachers use two approaches of using the language of instructions, either mother tongue (L) or English-medium Instruction (EMI).

Grammar Translation Method

The Grammar Translation Method is also known as the Bilingual Method. In this method, the teachers use the native language (L1) of the students while teaching a second language (L2). In this approach, the teacher employs the students' native language to explain new vocabulary, grammar rules, and concepts in the target language.

Scholars argue the effectiveness of each method. Auerbach conducted research in 1993 in the USA among immigrant English learners and concluded that the Grammar Translation Method using the mother tongue is better in that it gives a sense of security to learners. Mother tongue plays a role in improving language fluency and smooth conduct of activities in the classroom (Atkinson, 1987). Other studies also found the effectiveness of using L1 in L2 teaching (Auerbach, 1993; Doyle, 1997; Hopkins, 1988; Schweers, 1999).

Direct Method

The Direct Method is also known as the Natural Method, that which teachers use English-medium Instruction (EMI) in teaching English. This approach to language teaching emerged in the late 19th and early 20th centuries as a reaction against the Grammar-Translation Method. The Direct Method emphasizes the teaching of language through immersion, focusing on communication and everyday conversational language rather than formal grammar rules. In the Direct Method, the use of the learners' native language is minimized or avoided altogether during instruction. The goal is to create an immersive language learning environment.

Maximilian Berlitz, who relocated from Germany to the United States in 1872, pioneered the method. Originally aiming to teach various languages through the conventional grammar approach, his outlook underwent a significant shift when he enlisted the assistance of a French instructor.

The direct method of language teaching emphasizes teaching vocabulary and grammar inductively, without the use of the student's native language. While opinions on the effectiveness of the direct method may vary. It has some perceived strengths such as active participation, developing students' oral communication skills, often incorporating everyday language and real-life situations, and making the learning experience practical and relevant to students. It tries to simulate an immersion experience, which is believed to be an effective way of learning a language and it promotes a more natural and

intuitive understanding of the language. In the direct method, vocabulary and grammar are taught in context, helping students understand how words and structures are used in real-life situations. It promotes natural language acquisition, and cultural awareness that helps students gain a deeper understanding of the culture associated with the language they are learning.

Argument of grammar translation vs direct method

Awan (2015) studied the feedback of 200 teachers about grammar translation and direct method. The study found that the direct method was more effective than grammar-translation in English teaching based on the feedback of teachers. A similar result of grammar translation being more effective was found in the survey among teachers (Abbas et al., 2022). Other empirical studies found the direct method more effective than the grammar-translation method (Zaid, 2008; Siraji et al., 2021). In second language learning, affective factors are important aspects for positive learning outcomes. The positive feeling of learners results in positive learning outcomes (Dornyei, 1994). In another study, Awan & Shafi (2016) found a majority of students liked the grammar-translation method, however, the direct method was more effective shown in the previous finding of Awan (2015). Kačka-Stanik (2016) found the direct method more effective than grammar-translation. The direct method is more effective in communicative language teaching such as speaking and listening (Batool et al., 2015). On the other hand, a study by Bhatti & Mukhtar (2017) indicated there was no significant difference regarding to effectiveness between grammar translation and direction method. There are other studies indicating that grammar translation is an effective teaching method. A study by Gamage (2020) conducted quasi-experimental research pointing to the positive effectiveness of the grammar-translation method in teaching English. Navidinia et al. (2020) found that grammar translation is more effective than the direct method approach.

Thus, there are conflict results on which method is more effective. Therefore, the current study tried to find a more effective medium of instruction by using English as a second language and Adi as a mother tongue.

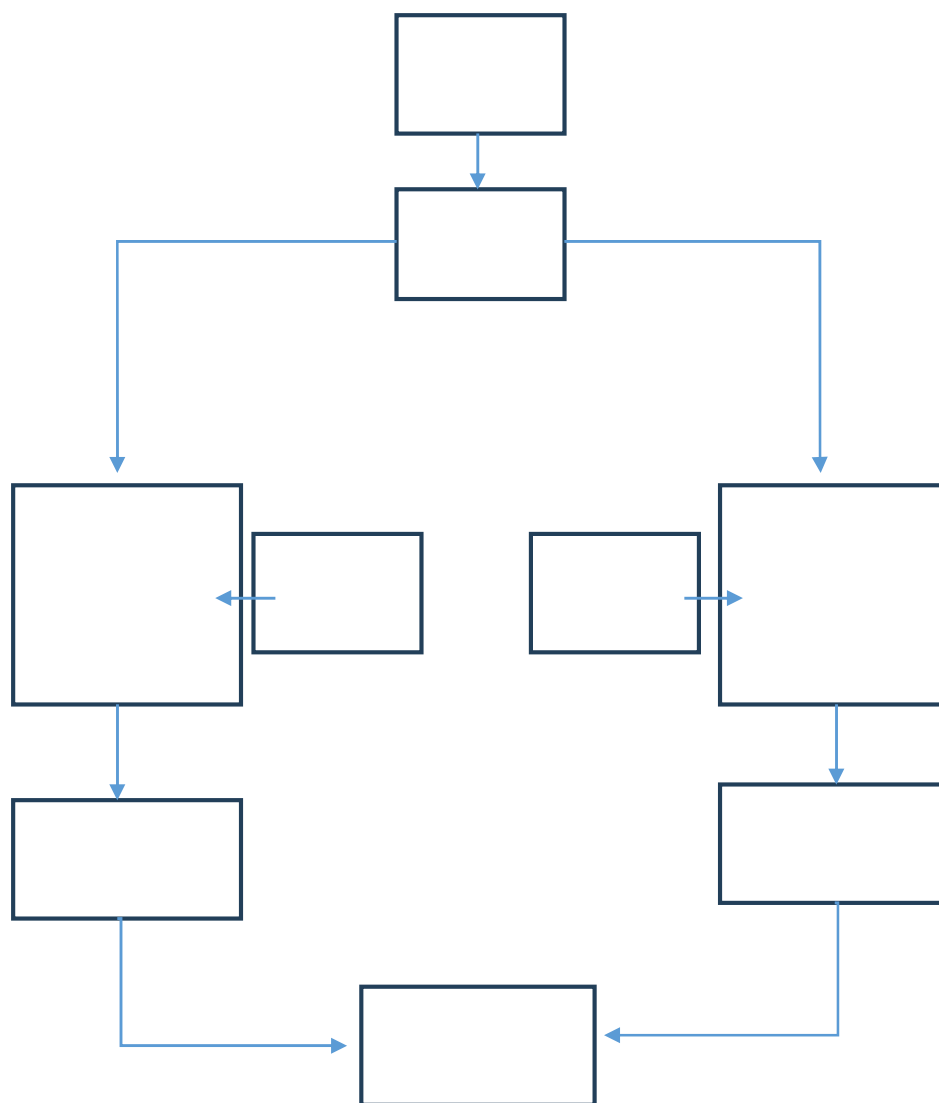
Research Methodology

Research design

The study was an empirical experimentation of using Adi's mother tongue and English language as the medium of instruction in teaching English. A mixed level of students was put together as an experiment. It was a quasi-experimental that the whole sample was taken as an experimental group without a control group. A pre-test and post-test were employed to observe the effect of using English and Adi language as medium of instruction in English learning class. The experiment was conducted in two

rounds of experiments. In the first round (Phase I) English was used as the medium of instruction. After 4 weeks of teaching, post-test (Achievement test) scores were collected. In the second round (Phase II), Adi language was used as the medium of instruction. This mother tongue was used for explanation and grammar translation method for 4 weeks, and achievement test (Post-test) scores were collected. In the second round, English was used as the medium of instruction with a direct method of language teaching. The skill areas of English learning were vocabulary, reading comprehension and speaking.

Figure 1. Flowchart Diagram Showing the Steps of the Study



Population and sample

The population of the study was mixed levels of students. The sample students were pulled from classes V, VII, IX to X students. A total sample of 50 students was taken as the sample of study from the Government Secondary School, Kebang, Arunachal Pradesh.

Data collection

The participants were from different grade levels, there were different proficiency scores during the pre-test score. The pre-test score was to observe the level of language knowledge. Therefore, pre-test scores were not used in the comparison of achievement scores. Twenty marks pre-test and post-test to the participants. After one month for each method of teaching method (one month with the direct method with English medium instruction and another month with grammar translation in Adi's mother tongue), post-test scores were collected. For Post-test scores, see Appendix.

Data analysis

A paired sample t-test was conducted for the post-test scores of English through the medium of English and Adi medium of instruction. The test was conducted using SPSS 26. Paired sample statistics and Paired Sample t-test results are shown in Table 1 and Table 2 below.

Table 1. Paired Samples Statistics

| | | Paired Samples Statistics | | | |
|--------|---------------|---------------------------|----|----------------|--------------------|
| | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | English Score | 8.1600 | 50 | 1.29929 | .18375 |
| | Adi Score | 17.1800 | 50 | .69076 | .09769 |

There was a significant difference in the scores for English medium instruction group (M=8.16, SD=1.29) and Adi mother tongue medium of instruction group (M=17.18, SD=.69) conditions; $t(49) = -40.931$, $p = .000$.

Table 2. Paired Sample t-test for English Medium and Adi Language Medium Instruction

| | | Paired Samples Test | | | | | | | |
|------|---------------------------|---------------------|----------------|-----------------|---|--------|---------|----|-----------------|
| | | Paired Differences | | | | | t | df | Sig. (2-tailed) |
| | | Mean | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | |
| Pair | | | | | Lower | Upper | | | |
| 1 | English Score – Adi Score | -9.020 | 1.558 | .220 | -9.462 | -8.577 | -40.931 | 49 | .000 |

Findings

In teaching English subjects, using Adi mother produced better achievement mean test scores of 17.18, which was higher than the mean test score of English medium instruction, 8.16. The t-test for English medium and Adi mother tongue medium of instruction showed statistically significant with $p=.000$, which is less than the threshold p-value, $p<.005$. It interprets, that Adi's mother tongue medium of instruction is more effective than using English as the medium of instruction in teaching English subjects.

Discussion

English has become an important international language globally and it is often considered a key to opening the doors of success for many people on the global platform. Consequently, many non-English-speaking countries have been implementing English as a medium of instruction in academic institutions. Education in a language other than the mother tongue is common among the private schools in India. This is increasingly relevant in tertiary education, due to the growing international mobility of students. Being able to speak English fluently is a matter of pride among friends and colleagues. It is also pride for parents of children who could speak English well. However, there is little knowledge about language acquisition among the non-native English-speaking Adi community. From the point of the direct language teaching method, Awan (2015), Abbas et al.(2022), Zaid (2008), and Siraji et al.(2021) pointed using a second

language (English) was better for a communicative point of view which is in contrast to the present finding. From the socio-geographical location, the present population of the study, the Government Secondary School, Kebang is located in a rural region. Students were facing the problem of the English language because many of the students were coming from different areas of the village where English is not used on a daily basis. There was a lack of English exposure among the students of rural backgrounds. In this school, most of the students used their Adi mother tongue. Adi language is spoken by Adi tribes and the area was dominated by Adis. There is a lack of using English outside the classroom as the whole community could speak in a mono-lingual, the Adi. Using English became a barrier to communication. Therefore, the grammar translation method was a more effective approach in support of the previous findings of Navidinia et al. (2020).

Conclusion

Using the mother tongue as a medium of instruction is more effective than using English as the medium of instruction in teaching English language skills.

Implication

There is supported evidence of benefits for each teaching method, the direct method and grammar translation method. Direct method is useful for communication language skills in spoken English. On the other hand, the grammar translation method has the advantages of explanation and description of language and instruction. The present finding has indicated more effectiveness in vocabulary, reading comprehension and speaking. As the students from village areas where English is not used on a daily basis, grammar translation is more effective. Therefore, language teachers should come up with mixed approaches to teaching students in rural areas.

References

- Abbas, S., Asghar, I. & Ahmad, N. N. (2022). Evaluating Grammar Translation Method and Direct Method in Teaching English Language at Secondary Level. *Competitive Social Science Research Journal*, 3(1), 1–12. Retrieved from <https://cssrjournal.com/index.php/cssrjournal/article/view/39>
- Alieto, E. (2018). Language Shift from English to Mother Tongue: Exploring Language Attitude and Willingness to Teach among Pre-service Teachers. *TESOL International Journal*, 13(3), 134-146.

- Atkinson, D. (1987). The mother tongue in the class room: A neglected resource? *English Language Teaching Journal*, 41(4), 241–247.
- Auerbach, E. (1993). Reexamining English only in the ESL classroom. *TESOL Quarterly*, 27(1), 9–32.
- Atkinson, D. 1987. The mother tongue in the classroom: A neglected resource? *ETL Journal*, 41(4), 241–247.
- Awan, A. G. & Shafi, M. (2016). Analysis of Teaching Methods of English Language at Government Secondary School Level in D.G. Khan City-Pakistan. *Global Journal of HUMAN-SOCIAL SCIENCE: G Linguistics & Education*, 16(8), 34-42.
- Awan, A. G. (2015). Comparison of GTM and Direct Method of Teaching English at Elementary Level in Pakistan. *Global Journal of Management and Social Sciences*, 1(1), 17-30.
- Batool, N., Anosh, M., Batool, A. & Iqbal, N. (2015). The Direct Method: A Good Start to Teach Oral Language. *Journal of Literature, Languages and Linguistics*, 5, 53-55.
- Bhatti, M. S. & Mukhtar, R. (2017). ANALYZING THE UTILITY OF GRAMMAR TRANSLATION METHOD & DIRECT METHOD FOR TEACHING ENGLISH AT INTERMEDIATE LEVEL. *IJAEDU- International E-Journal of Advances in Education*, 3(7), 60-67.
- Dearden, J. (2014). English as a medium of instruction -a growing global phenomenon. Department of Education, University of Oxford. www.britishcouncil.org/educational/ihe
- Dornyei, Z. (1994). Motivation and Motivating in the Foreign Language Classroom. *The Modern Language Journal*, 78(3), 273. <https://doi.org/10.2307/330107>
- Doyle, T. 1997. The L1's role in ESL instruction. Paper presented at TESOL '97 in Orlando, FL.
- Ejeh, M. U. (2004). Attitudes of student teachers towards teaching in mother tongue in Nigerian primary schools: Implications for planning. *Language, Culture and Curriculum*, 17 (91), 73-81. doi: 10.1080/07908310408666683.
- Gamage, K. G. S. (2020). The Pedagogical Application of the Grammar Translation Method as an Effective Instructional Methodology in Teaching English as a Second Language. *Open Access Library Journal*, 07(11), Article 11. <https://doi.org/10.4236/oalib.1106913>
- Hopkins, S. (1988). Use of mother tongue in teaching of English as a second language to adults. *Language Issues*, 2(2), 18-24.

- Hopkins, S. 1988. Use of mother tongue in teaching of English as a second language to adults. *Language Issues*, 2(2), 18–24.
- Kacka-Stanik, I. (2016). The Influence of the Grammar- Translation Method and the Direct Method on Students' Results. *Respectus Philologicus*, 30(35).
<https://doi.org/10.15388/RESPECTUS.2016.30.35.11>
- Navidinia, H., Khoshhal, M., & Mobaraki, M. (2020). Exploring the effectiveness of using L1 in teaching grammar to English as a foreign language learner. *AJELP: Asian Journal of English Language and Pedagogy*, 8(1), Article 1.
- Perez, A. & Alieto, E. (2018). Change of "Tongue" from English to a Local Language: A correlation of Mother Tongue Proficiency and Mathematics Achievement. *Asian ESP Journal*. 14.
- Sah, P. K. (2020). English medium instruction in South Asian multilingual schools: unpacking the dynamics of ideological orientations, policy/practices, and democratic questions. *International Journal of Bilingual Education and Bilingualism*, 1-14.
- Schweers, C. W. Jr. (1999). Using L1 in the L2 Classroom. *English Teaching Forum*, 1-13.
- Siraji, A. D., Jawali, A. F. T. & Darkis, J. M. (2021). Grammar Translation Method versus Direct Method and its Effectiveness on Reading Comprehension among First year College Students in Sulu State College. *TESOL International Journal*, 16(8), 114-131.
- Zaid, A. S. (2008). THE EFFECTIVENESS OF DIRECT INSTRUCTION IN TEACHING ENGLISH IN ELEMENTARY PUBLIC EDUCATION SCHOOLS IN KUWAIT: A RESEARCH CASE STUDY. *EDUCATION*. 129. 80-90.

Appendix

Post-test Achievement Scores after teaching with English and Adi language as medium of instruction in teaching English

| Sl. No. | English Score after using English as medium of instruction | English Score after using Adi as medium of instruction |
|---------|--|--|
| 1 | 10 | 17 |
| 2 | 10 | 17 |
| 3 | 11 | 17 |
| 4 | 10 | 17 |
| 5 | 10 | 17 |
| 6 | 11 | 17 |
| 7 | 12 | 17 |
| 8 | 10 | 17 |
| 9 | 10 | 18 |
| 10 | 8 | 18 |
| 11 | 8 | 18 |
| 12 | 8 | 18 |
| 13 | 8 | 17 |
| 14 | 7 | 18 |
| 15 | 8 | 18 |
| 16 | 8 | 18 |
| 17 | 7 | 18 |
| 18 | 7 | 17 |
| 19 | 7 | 17 |
| 20 | 7 | 16 |
| 21 | 8 | 16 |
| 22 | 7 | 16 |
| 23 | 7 | 16 |
| 24 | 7 | 16 |
| 25 | 7 | 18 |
| 26 | 8 | 18 |

| | | |
|----|----|----|
| 27 | 8 | 17 |
| 28 | 7 | 17 |
| 29 | 7 | 17 |
| 30 | 7 | 17 |
| 31 | 9 | 17 |
| 32 | 7 | 17 |
| 33 | 7 | 17 |
| 34 | 7 | 17 |
| 35 | 8 | 17 |
| 36 | 8 | 18 |
| 37 | 8 | 18 |
| 38 | 8 | 18 |
| 39 | 7 | 18 |
| 40 | 7 | 18 |
| 41 | 7 | 18 |
| 42 | 7 | 18 |
| 43 | 9 | 16 |
| 44 | 10 | 16 |
| 45 | 9 | 16 |
| 46 | 8 | 17 |
| 47 | 8 | 17 |
| 48 | 8 | 17 |
| 49 | 8 | 17 |
| 50 | 8 | 17 |