



Effect of Learning Style on Achievement in English: An Action Research among First-Generation Undergraduate Tribal Learners

Priya Topno¹ & Dr. Parimal Sarkar²

1. Research Scholar, School of Education, Netaji Subhas Open University, Kolkata, West Bengal
2. Assistant Professor, School of Education, Netaji Subhas Open University, Kolkata West Bengal

*Corresponding Author: Priya Topno¹

Abstract:

English is an essential language of communication in higher education. Its users reap beneficial dividends in multifarious forms. Despite the popularity and extensive usage of the language, there still are sections of people who struggle with the use of the English language in academics. Among those many sections, the first-generation tribal learners are in a typical situation as they lack the academic guidance from their previous generations in comparison to those learners who have received education for many generations. This study looks into the issue of first-generation tribal learners pursuing English medium education at the undergraduate level. The study has been conducted in the form of action research where the application of English teaching strategies on the basis of the learner's learning style(s) have been implemented. The study being action research, is centered around the classroom difficulties faced by the teacher-researchers in the course of their teaching first-generation tribal learners. It employs a quasi-experimental one-group pretest-posttest design and the findings reveal that teaching English according to the preferred learning style of the learners has a positive effect on their achievement in English.

Keywords: Action research, learning styles, VARK model, achievement in English, first-generation tribal learners.

Introduction:

English is a widely used language both as a mother tongue and a second language in many countries, thereby transforming it into the *lingua franca*. It is one of the most important global languages making globalization possible in the world. English is essential for communication, education, employment, and cultural exchange. At the diplomatic and political levels too, English stands at a vantage point as the most favoured language of communication across various countries. It is said to be the gateway to the knowledge of several fields and disciplines and international academia is heavily dependent on it with a voluminous amount of research being carried out in English. Because of its wide usage and popularity, it is the most sought-after language and calls for a sound acquisition of the language.

The association of English with India dates back to colonial times when, with the implementation of

Macaulay's Minutes, English, though a foreign language, found its way into the multi-linguistic fabric of India through formal education. Today, the urban and rural populations in India regard English not just as a language but also as a road to upward social mobility, economic betterment, and a powerful agent for social change. As a result, the change from English Language Teaching (ELT) to English as a Medium of Instruction (EMI) is a recent trend in English education in India, and state governments are frequently implementing EMI in state-supported institutions (Viswanath, 2020).

In the bargain, it is the first-generation learners, who struggle with the challenges of coping with the demands of an English-speaking environment in their educational or work sphere. There are, however, many, first-generation learners who have, undauntingly braved the challenges and have successfully acquired the language for their benefit, which when studied closely, is a result of many factors including favourable and effective pedagogical methodology complementing the learning style.

First-generation Learners

An individual whose parents didn't complete their higher secondary education is referred to as a first-generation learner. The student is still regarded as a first-generation learner even if one or more of their siblings have gone to a post-secondary school. First-generation learners may come from lower-income households, middle-class or upper-class families, or families without a tradition of sending their children to college. In many tribal communities, particularly, the existence of first-generation learners outnumbers the ones in other communities. Some people have parents who encourage them to pursue further education, while others face pressure from their families to start working as soon as they graduate from high school (Kiran & Daniel, 2017).

Tribal learners

The scheduled tribe population in India has made remarkable progress in education with regard to the quantitative data available. However, the status of higher education among tribal learners in India is a matter of concern. The enrollment and completion rates of tribal students in higher education institutions still need to be higher than the national norm, even with some recent progress. As per the Ministry of Education in India, a mere 5.8% of ST students continue higher education, while the national average is roughly 27.3% (AISHE, 2020-21).

There are numerous challenges that a first-generation tribal learner has to face and overcome when it comes to pursuing higher education. One of the many challenges is the acquisition of the English language with fluency as it is an essential mode of communication in higher education. Many first-generation tribal learners struggle to bridge the gap between their educational attainment and English language acquisition. It is at this critical juncture that educational institutions, teachers, and facilitators are to intervene in multifarious ways to reduce the gap. In this study, endeavours have been made to aid first-generation tribal learners in their learning process by looking into their learning styles and employing pedagogical strategies suitable to their style of learning. Awareness of learning style makes an impact on pedagogy- the way in which teachers choose to teach- and helps teachers to a better understanding of the needs of learners as well as to differentiate teaching-learning materials, not only by the level of difficulty but also by the preferred learning style (Pritchard, 2008 p.42).

Learning Style

Learning style is a term used to portray individual differences in the way that people prefer to learn. Learning styles are typical patterns individuals use to process information or approach learning situations. These learning style preferences are thought to occur naturally. According to learning style theory, when an individual's learning preferences are met, the individual learns more easily and effectively. There are more than 70 theories and models of learning styles. Each model describes how particular kinds of

individual differences influence learning (Salkind, 2008 p.597). For this study, the Visual, Auditory, Reading/Writing, and Kinaesthetic (VARK) model developed by Neil Fleming in 1987 has been referred to. The VARK model lays emphasis on sensory engagement in learning as (Fleming, 2001) clarifies that we make use of our senses when we gather information from the world around us which includes information that we need for learning (Pritchard, 2008). Simply put, the VARK model identifies learners on the basis of their preferred learning style(s) which comprises the Visual learners who learn visually and prefer figures, pictures, and symbolic tools like graphs, flowcharts, and models. Auditory learners prefer to learn by listening they benefit from audio tapes, podcasts, videos, and videotapes. Reading/writing learners are those who learn by reading or writing. They prefer resources like textbooks, journal publications, written notes, online articles, and other written texts. Kinaesthetic learners are those who learn by experience or active involvement in the learning activity. They benefit from observation or engaging in activities and experiments. Some employ multiple senses to learn and do not have a strong preference towards one particular learning style and so they fall under the category of multi-modal learners with the flexibility of learning style according to the need and requirement of the learning situation.

It is against this backdrop that this independent study examines the utility of the intervention of teaching English according to the preferred learning style of first-generation tribal learners to ameliorate the challenges faced by them and improve their achievement in English while pursuing an undergraduate course from an English medium college in West Bengal, India. This study is primarily an action research and it has emerged from the need to address the problem faced by the authors in their classroom environment. As rightly stated, action research enables teachers to examine their own classrooms for instance, their own instructional strategies, students, and assessments in order to better comprehend them and be able to enhance their efficacy or quality. It focuses especially on the distinctive qualities of the target audience for practice or the target audience for a required activity. The practitioner then becomes more useful and effective as a result of this (Parsons & Brown, 2002).

Structure of the Study

The present study, being action research, follows the structure, stages, and procedure of one. The structure followed in this research is based on the four-stage procedure consisting of nine specific steps to carry out action research (Mertler, 2020) as depicted in Figure 1.

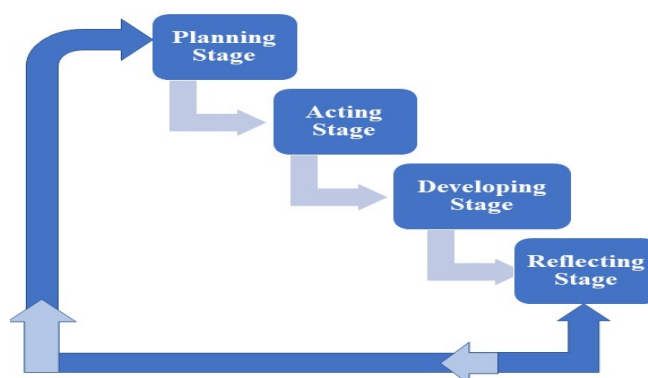


Figure 1. Stages of Action Research

I. Planning Stage

At this stage, a plan is formulated on the basis of the following four steps to conduct the research:

1. *Identifying and limiting the topic*- The present study has been conducted out of the felt need of the low academic performance and poor communication skills in English of the students in the classroom of the authors. It was observed that most of the students in this group were first-generation tribal learners. It was

also observed that the “one size fits all” teaching methodology was not catering to the diverse requirements of the learners hence, resulting in their poor performance. The peculiarity of the situation piqued the interest of the authors and a quest to resolve the issue by assisting the learners to improve their English language skills through their preferred learning style began.

2. *Gathering information*- This step implies collecting the required details and knowledge about the observed problem at hand from various quarters connected to the research problem. It also signifies associating the collected information with the proposed research problem through self-reflection, description, and explanation (Mills, 2011).

For this study, information with regard to the research problem was gathered from all the faculty teaching in the Department of Education and a conclusion was made that it was the same set of learners whose academic performance and achievement were low in almost all the papers taught in the department.

3. *Reviewing the related literature*-For this action research, relevant literature was reviewed. Literature with regard to action research, learning style, achievement test, English language learning, and first-generation tribal learners were taken into consideration. A review of the related literature helped in the formulation of the basis and foundation of the study.

4. *Developing a research plan*- The present study is of the practical action research type which pays more attention to solving a specific problem or needs in a classroom, school, or a similar environment (Fraenkel et al., 2012). The research design followed in the study is that of a quasi-experimental study with a one-group pre and post-test design. Mark & Gamble (2009) discuss the relatively simple quasi-experiment, the one-group, pretest-posttest design, as a study in which participants are measured on an outcome variable both before and after the treatment of interest. The researchers hope that if the treatment is effective, outcome scores should improve, while scores will hold steady if the treatment has no effect (Mertens, 2015). The independent variable in this study is Learning Style, which influences the dependent variable, Achievement in English. The study was conducted on a group of thirty-eight participants belonging to one particular classroom. The names of the participants and the institution have been withheld to preserve the anonymity of the first-generation tribal learners on ethical grounds.

The study revolves around the following broad research question and seeks to answer it at every stage and step of the research:

Q. How does teaching language according to the learners’ learning style impact the achievement in English among first-generation tribal learners?

The following objectives are to be attained through the research:

- a) To assess the scores of first-generation tribal learners in the English Achievement Test (pre-test scores).
- b) To identify the learning styles of first-generation tribal learners.
- c) To teach English to first-generation tribal learners on the basis of their preferred learning styles (intervention).
- d) To assess the scores of first-generation tribal learners in the English Achievement Test (post-test scores).

Based on the above research question and objectives, the following hypotheses have been formulated:

H₀₁: There is no significant difference between the pre-test and post-test scores of the English Achievement Test of first-generation tribal learners.

H₀₂: There is no significant relationship between learning style and achievement in English among first-generation tribal learners.

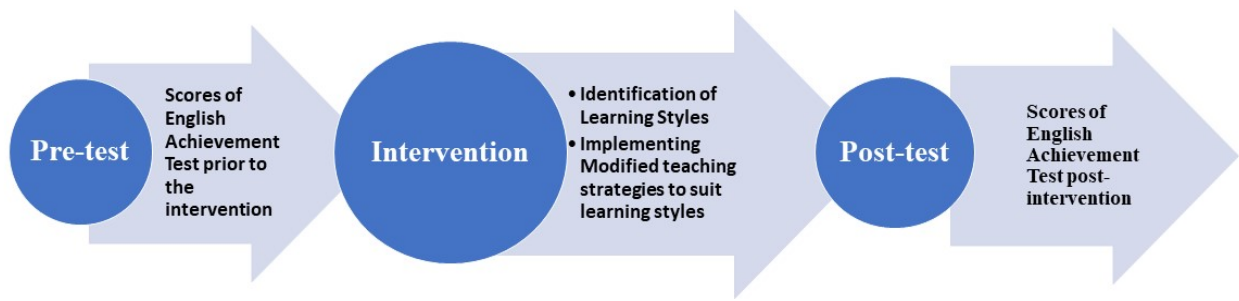


Figure 2. A Diagrammatic representation of the research plan at hand.

II. Acting Stage

This stage comprises the procedure of collecting and analyzing the data. Decisions with regard to instrumentation and interpretation of data are taken and the stage consists of the following two steps:

5. *Implementing the plan and collecting data*- Data for this study was collected in three phases. The authors developed and standardized the tools used for the study. In the first phase (Pre-test) Achievement Test in English was administered, in the second phase (Intervention) Learning Styles Inventory based on VARK Model was used and in the third phase (Post-test) Achievement Test in English was once again administered to test the efficacy and relevance of teaching English on the basis of student’s learning style.

6. *Analyzing the data*-Action research data analysis is often considerably less extensive and detailed than in other, more formal research investigations(Fraenkel & Wallen, 2003). Given the nature of the research, descriptive statistical analysis has been used to analyze and interpret the data at hand. Tables 1 and 2 reflect the analysis of the two null hypotheses stated at the beginning of the study.

Analysis of H_{01} :

Variable	N	Mean	SD	SE _M	SE _D	df	r	t	Remarks
Pre-test	38	16.86	3.69	0.60	0.7	37	0.56	5.30	Significant difference H_{01} rejected
Post-test	38	31.13	5.12	0.83					

Table-1

From Table 1 it is evident that a significant difference lies between the mean scores of pre-test and post-test results as the calculated value of ‘t’ is 5.30 as against the critical value (table value) of 1.68 at 37 degrees of freedom on a one-tailed ‘t’ distribution. As the ‘t’ ratio is higher than the critical value, the null hypothesis H_{01} : There is no significant difference between the pre-test and post-test scores of the English Achievement Test of first-generation tribal learners is rejected. Therefore, it is understood that teaching English to first-generation tribal learners with the intervention of learning styles can improve their performance.

Analysis of H_{02} :

Variable	N	Mean	SD	SE _M	SE _D	df	r	t	Remarks
Learning Style	38	191.84	17.79	2.88	2.97	37	0.03	4.21	Significant relationship H_{02} rejected
Post-test	38	31.13	5.12	0,83					

Table-2

From Table 2 it is evident that a significant difference lies between the mean scores of Learning Style and Post-test results of the Achievement Test in English of the participants as the calculated value of 't' is 4.21 as against the critical value (table value) of 1.68 at 37 degrees of freedom on a one-tailed 't' distribution. As the 't' ratio is higher than the critical value, the null hypothesis H_{02} : There is no significant relationship between learning style and achievement in English among first-generation tribal learners is rejected. Therefore, it is understood that the learning style of first-generation tribal learners affects their achievement in English.

III. Developing Stage

7. *Developing an action plan*- This stage is crucial and is the "action" part of any action research. The development of an action plan's most significant outcome is the existence of a specific and measurable strategy for evaluating new ideas as a means of resolving the initial issue (Creswell, 2005). It is primarily a proposed blueprint for putting into practice the outcome of the action research project (Mertler, 2020). The action plan for this research revolves around the teaching techniques and strategies adopted to teach English based on the preferred learning style of first-generation tribal learners.

Learning Style	Visual (V)	Auditory (A)	Reading-Writing (R)	Kinaesthetic (K)	Multi-Modal
Number of learners (total-38)	12	1	7	14	4 (R/K= 3 V/A= 1)
Percentage-wise distribution	31.57%	2.63%	18.42%	36.84%	10.52% (R/K= 7.89% V/A= 2.63%)

Table 3

Table 3 reflects the learning style of the learners and the number/ percentage of learners that fall within the different categories. It can be deciphered from Table 3 that a maximum number of learners have the kinaesthetic style of learning, even in the multi-modal category, the learners having kinaesthetic learning style outnumber the other style of learning. The other style of learning comprising a good number of students is the visual style, followed by the reading-writing style and the least number of students belongs to the auditory style. Based on this result the teaching of English to the target group was planned accordingly wherein the students were divided into groups of their preferred learning style and learning of English was facilitated accordingly for one semester.

The portions that were dealt with were formulated keeping in mind the four skills of language learning consisting of listening, speaking, reading and writing (LSRW). So, the content for instruction comprised grammar, comprehension, prose (a short story), poetry and paragraph writing. The objective of the instructional process was to enable the learners to communicate (verbally or in writing) in English without making grammatical mistakes. The strategies adopted to achieve this objective based on the preferred learning style of the learners are reflected in Figure 3.



Figure 3. VARK Pedagogical Strategies Used for the Study

IV. Reflecting Stage

8. *Sharing and communicating the results*- The goal of any research is the generation of new knowledge and its dissemination. So, it is with action research too. Action research may be carried out for a specific scenario, like in the case of the present study, nevertheless, its contribution to the larger educational community should not be overlooked. With regard to sharing and communicating the results of action research, Johnson (2008) suggests a variety of modes from informal sharing with immediate colleagues to sharing the information at the institutional level and further communicating the results through formal forums like seminars or journal publications at professional level.

The results of the present study were shared and presented to the departmental colleagues at a meeting and it was concluded that other papers or subjects would be taught to all the learners in the department keeping the learning styles of the learners in mind.

9. *Reflecting on the process*-Action research focuses primarily on conducting a critical analysis of one's own practice. One must carry out a systematic reflection of one's practice in order to critically assess it. Action research requires reflection, which must be executed at the close of each action cycle. It is an essential step since it is here that the teacher-researcher evaluates what has been done, assesses its efficacy, and decides on potential adjustments for future project implementations, which almost certainly involve more cycles of action research(Mertler, 2019). As observed by Mertler (2019), action research is not linear but a cyclical process involving observation, action, observation, modification, and so on and hence, it is at this last step, reflection, that the action research cycle completes a full circle making way for further observation and changes in the plan.

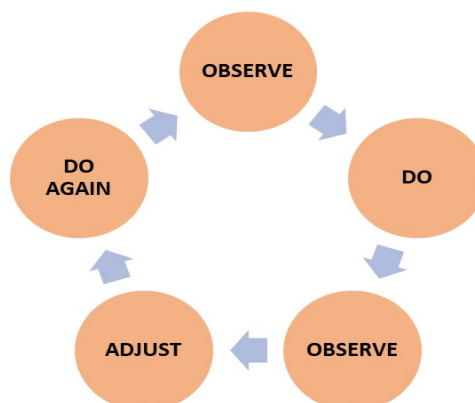


Figure 4. Cyclic Process of Action Research

In the present study at hand reflections with regard to the entire research were made and the following observations were arrived at:

- Learning styles are to be adopted across the department as a means to understand the learner better.
- Existing pedagogical strategies are to be revisited on the basis of the learner's preferred learning style.
- New and innovative strategies are to be devised according to the requirement of the learner and the subject matter to aid efficacious learning.
- Other models of learning styles, other than VARK, are to be explored and implemented while modifying the pedagogical strategies.

Conclusion:

This study, following the procedure of action research, has systematically achieved the goals set at the start of the study. The research question posed at the beginning has been answered in the affirmative wherein the findings prove that teaching language according to the learner's learning style has a positive impact on the achievement in English among first-generation tribal learners. In the pursuit of answering the broad research question, the objectives laid down for the study were also attained and the hypotheses tested, the results of which have been discussed in Tables 1 and 2.

The study at hand has a successful and fruitful implication of action research. Nevertheless, there are some limitations and delimitations of the study. The study being a one-group pretest-posttest design is open to the threats of history, maturational change, testing, and instrumentation (Mertens, 2015). Also, the sample of the study is delimited to just the first-generation tribal learners. Further studies of similar kinds can explore broader designs and larger samples to achieve greater impact.

References:

- All India Survey on Higher Education 2020-21, Department of Higher Education, Ministry of Education, Government of India, New Delhi.
- Creswell, J. W. (2005). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research*. Upper Saddle River, NJ: Pearson.
- Fleming, N. J. (2001). *Teaching and Learning Styles: VARK Strategies*. Christchurch, N.Z.: Neil Fleming.
- Fraenkel, J R; Wallen, N E; Hyun, H H. (2012). *How to design and evaluate research In education*. New York: Mc Graw Hill.
- Fraenkel, J. R., & Wallen, N. E. (2003). *How to design and evaluate research in education*. New York: McGraw-Hill.
- Johnson, A. P. (2008). *A Short Guide to Action Research*. Boston, MA: Allyn and Bacon.
- Kiran, R., & Daniel, Y. (2017). Problems faced by first generation learners in high schools from Palani educational district, Tamil Nadu. *Research and Reflections on Education*, 16(3). Retrieved April 22, 2023, from <https://www.sxcejournal.com/oct-dec-2017/paper3.pdf>
- Mark, M. M., & Gamble, C. (2009). Experiments, quasi-experiments and ethics. In D. M. Mertens, & P. E. Ginsberg (Eds.), *Handbook of social research esthics* (pp. 198-213). Thousand Oaks, CA: Sage.

- Mertens, D. M. (2015). *Research and Evaluation in Education and Psychology* (4th ed.). Thousand Oaks, CA: Sage.
- Mertler, C. A. (2020). *Action Research: Improving Schools and Empowering Educators*. Sage Publications.
- Mills, G. E. (2011). *Action Research: A Guide for the Teacher Researcher*. Upper Saddle River, NJ: Pearson.
- Parsons, R. D., & Brown, K. S. (2002). *Teacher as reflective practitioner and action researcher*. Belmont, CA: Wadsworth/Thomson Learning.
- Pritchard, A. (2008). *Ways of Learning, Learning Theories and Learning Styles in the Classroom*. Taylor & Francis e-Library. Retrieved from <https://www.taylorfrancis.com/>
- Salkind, N. J. (2008). In *Encyclopedia of Educational Psychology* (Vol. 1&2). Sage Publications.
- Viswanath, K. (2021, November 3). *Biju Patnaik Central Library National Institute of Technology*. Retrieved April 15, 2023, from EThesis@NIT Rourkela: <http://ethesis.nitrkl.ac.in/10238/>

Citation: Topno. P. & Sarkar. Dr. P., (2024) “Effect of Learning Style on Achievement in English: An Action Research among First-Generation Undergraduate Tribal Learners”, *Bharati International Journal of Multidisciplinary Research & Development (BIJMRD)*, Vol-2, Issue-6, July-2024.