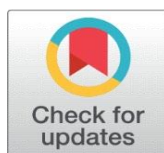
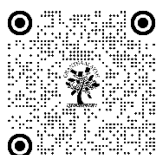


# BEYOND ROTE LEARNING: USING CONSTRUCTIVIST APPROACH TO ENHANCE GRAMMAR COMPREHENSION AND APPLICATION IN ENGLISH WRITING

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## ABSTRACT

The shift from conventional teaching methods to learner-centric approaches reflects the changing landscape of education towards more individualised and engaging learning experiences. Constructivism is a creative approach that is one of the best methods for improving English language proficiency. It is a well-known learner-centric method emphasising active participation, inquiry, and knowledge-building in interactive, discussion-based learning settings. The National Education Policy (2020) also supports a pedagogical framework that focuses on the student and encourages experiential learning, holistic growth, inquiry-based investigation, and adaptable teaching methodologies. This study examines the efficacy of authentic teaching practices rooted in the constructivist approach to teaching grammar in secondary schools. This study supports the NEP's goal of using constructivist, learner-centric techniques to transform education. The research design employed is quasi-experimental. Data is gathered from two intact classes of the ninth grade, comprising around 80 students from Aligarh Muslim University. The control and experimental groups consist of 40 participants each, ensuring equal sample sizes in both groups. The sample is chosen using the convenient sampling method, and the data is analysed using suitable statistical techniques such as t-tests and ANCOVA. The study results will be used to modify and reorganize instructional strategies so students acquire grammatical structures more successfully.

**Keywords:** Constructivist Approach, National Education Policy (2020), English Grammar, Tenses, Secondary School Students

## 1. INTRODUCTION

Constructivist learning theory in education has gained popularity due to its ability to create engaging and meaningful learning environments. Constructivism holds that learners construct knowledge through cognitive, cultural, emotional, and social processes. It focuses on critical thinking, involvement, and participation (Scholnik & Abarbanel, 2006; Chand, 2023). The rise of this paradigm has co-occurred with a change in teaching methods, moving away from models that prioritise the transmission of information by the teacher towards approaches that prioritise knowledge and the learner. These approaches are influenced by Piaget's cognitive development theory and Vygotsky's sociocultural development theory. Within the frame work of constructivism, knowledge is not perceived as a tangible

entity that can be transferred directly from an expert to a learner. Instead, it is perceived as a construct formed via active engagement and interaction with the external environment. (Scheclovnik and Abarbanel, 2006).

It is based on the principles of action-oriented learning and cooperative learning, where students are motivated and assisted in obtaining the curriculum's core idea through individual interpretation of their experiences. Increased focus on the learner-centeredness of this method of instruction leads to greater personalisation of instruction and student interaction. With today's constantly changing ways of teaching and learning, the most important thing about a constructivist method of pedagogy is that it can be changed to fit new realities. Constructivists say that knowledge is a network students build and understand using what they have learnt (Szabó & Csépes, 2022).

Constructivism is said to be influenced by cognitive and socio-cognitive theories. Cognitive constructivism is based on Piaget's theory and focuses on the development of cognitive abilities and the individual's building of knowledge. On the other hand, social constructivism highlights the social aspect of knowledge construction and is commonly associated with Vygotsky's work. Piaget's developmental theory promotes a comprehensive approach. Learning is a progressive process encompassing transformation, self-creation, and construction, with each step building upon previous learning encounters. Children acquire knowledge by actively engaging in activities such as reading, listening, exploring, and gaining firsthand experience. These processes consist of three separate yet interconnected assimilation, accommodation, and equilibrium processes. The accommodation process involves assimilating and integrating new experiences into existing or developing schema. The result of these processes is equilibrium, which refers to the attainment of fresh insights, logical consistency, and cognitive stability (Kaufman, 2004). Information assimilated changes cognitive structures. Piaget believes cognitive structures adapt to their environment. Thus, learning is a continuing interplay between mind and environment that never ends. According to Piaget, cognitive systems are always "under construction." (Kaufman, 2004; Schcolnik & Abarbanel, 2006) Lev Vygotsky's social constructivism highlights cultural and social learning and knowledge development variables. (Vygotsky 1978) According to Vygotsky, children's thinking and meaning-making are socially created and originate from social interactions with their surroundings. Parents, friends, teachers, and others help kids learn in the community. Vygotsky's zone of proximal development represents learners' readiness to learn. It is the gap between learners' current and potential progress. The design of problem-solving projects and their learning potential influence how much scaffolding students need. Active engagement, discovery, concept acquisition, and external and internal scaffolding are crucial to learning. External scaffolding breaks down activities, demonstrates, guides, provides feedback, and gives learners accountability for learning. Internal scaffolding promotes introspection and self-monitoring, boosting idea acquisition.

Teachers, in this sense, are also students. The educators carefully watch and identify the students' proximal development (ZPD) zone. They then create suitable, genuine, and significant learning modules and offer instructional assistance and scaffolding to help the students acquire more significant levels of understanding. (Kaufman, 2004)

## **2. CONSTRUCTIVISM AND LANGUAGE TEACHING**

The paradigm of pedagogies is undergoing a significant transformation in today's era of rapid technological advancements and evolving learner needs.

Traditional teaching methods, which once focused on rote memorisation and passive learning, have given way to innovative, student-centred approaches prioritising critical thinking, creativity, and collaboration. Digital tools and resources have enabled educators to create immersive, interactive learning experiences catering to diverse learning styles and abilities. Furthermore, the emphasis has shifted from mere content delivery to fostering essential skills like problem-solving, communication, and emotional intelligence. This shift towards a more inclusive, adaptive, and technology-integrated pedagogy empowers learners to take ownership of their educational journey, preparing them for success in an increasingly complex and interconnected world.

According to Baviskar et al. (2009), no matter the methods utilised, the goal of a constructivist lesson is to maximise students' learning possibilities. A key attribute of constructivist pedagogy is its capacity to adapt to the dynamic nature of 21st-century learning and teaching practices. Scholars who adhere to the constructivist view of knowledge hold that it is best understood as a web that students weave together as they gain experience. The core idea of the approach is the perception that a student is more of a person who acquires knowledge by constructing new knowledge rather than a "blank sheet" to be filled with information. (Szabó & Csépes, 2022)

Taking further the ideas of Piaget and Vygotsky, Jerome Bruner, the person associated most prominently with formulating a constructivist approach to language learning, sketched the task of the language learner as threefold: to learn the linguistic system (syntax), to learn to refer and express meaning (semantics) and to get something done with words and communicate effectively (pragmatics) (Suhendi, 2018). With its student-centric nature, the constructivist approach helps students navigate these objectives independently to obtain meaning. In this approach, learners are not passive recipients of language as the end product. Instead, they actively generate meaning based on the content they encounter in real-life situations as per their cognitive abilities. (Szabó & Csépes, 2022) Recent developments in language pedagogy have brought together various teaching strategies that highlight each learner's uniqueness and importance and participation in genuine and purposeful endeavours, both on an individual and group level.

The most essential aspect of learning language through constructivism theory is that the learner should get the emphasis in the learning process. Learners must proactively cultivate their knowledge rather than rely on others. Furthermore, learners must assume responsibility for the outcome of their learning. Their ingenuity and vitality will enable them to excel independently in their cognitive pursuits (Suhendi & Purwarno, 2018).

Collaborative and imaginative classroom work is the foundation of constructivism in language instruction. Constructivist classrooms need students to know their learning, language, and multicultural differences. An action-oriented approach is one of the cornerstones of a constructivist stance in language instruction. This method emphasises students' ability to think creatively and actively while learning, as well as their ability to learn by doing and teaching others (Kim, 2005). Besides learning the course contents, students can gain additional knowledge such as writing poetry, short drama, scenarios, diary writing, etc., because this constructivist theory opens the learner's curiosity about something new (Suhendi, 2018). The constructivist approach to grammar empowers students to engage with language actively, fostering deeper comprehension and practical

application. Educators can enhance grammar learning and writing skills by integrating constructivist strategies, ultimately improving academic standards.

### 3. NEED AND SIGNIFICANCE OF THE STUDY

Constructivism is a scientific and observational theory concerning how individuals acquire knowledge (Connor et al., 2006). It states that individuals construct their understanding of the world and knowledge by connecting new and existing concepts (*National Curriculum Framework*, 2005). NEP 2020 has also emphasised experimental and innovative methods for vibrant classrooms, making teaching learning and, specifically, language learning enjoyable. (National Education Policy, 2020). In a conventional educational setting, the teacher assumes the role of the class leader, commanding the entire class's attention as he imparts knowledge. While the students passively listen to the teachers (Kumar Shah, 2019). These matters give rise to specific challenges and conflicts among educators as their entire effort is futile. However, in a constructivist classroom, the instructor transfers knowledge while students actively participate and engage in constructing their understanding.

The constructivist perspective on classroom learning can be applied to various instructional strategies. In its broadest sense, it typically entails motivating students to generate new knowledge through active methods (experiments, problem-solving in the real world) and then ruminating on and discussing their progress and how their understanding is evolving. The instructor ensures that he comprehends the students' preexisting beliefs and directs the activity in a way that acknowledges and expands upon them.

Pandya (2015) asserts that contemporary classroom instruction has increasingly become repetitive and inert. In their inactive and passive state, the students assiduously retain the information presented in the classroom without critically reflecting. The teaching-learning process must enable advanced and sluggish learners to perceive and comprehend the concept meaningfully. It must enable the user to generate knowledge instead of merely restating facts.

One of the primary difficulties English as a second language learners encounter is the language proficiency barrier, leading to struggles in communication and comprehension. Additionally, cultural disparities and lack of exposure to English outside the classroom contribute to limited language development. Furthermore, learners often face difficulties with grammar acquisition and its usage. Constructivist approaches encourage students to explore language rules actively, analyse patterns, and apply them in the context of grammar. A constructivist approach tailored to individual student needs by incorporating interactive activities, real-life situations, and technology-based tools can enhance engagement and facilitate language acquisition. (Muna Aljohani, 2017)

Further, teachers should provide a supportive learning environment that encourages practice, error correction, and cultural immersion for ESL students to overcome their linguistic obstacles. Collaborative learning activities and peer interactions also significantly improve language skills and boost confidence (Sulistyowati, 2019). Therefore, a constructive approach could be applied as effectively in language-teaching classrooms as in any other field of education.

### 4. OBJECTIVES

- To find out the effectiveness of the Constructivist Approach in learning Tenses in English among IXth standard students

- To find out the effectiveness of the Herbartian Approach on learning Tenses in English among IXth standard students
- To compare the effectiveness of the Constructivist and Herbartian approaches on learning Tenses in English among standard IXth students.

## 5. HYPOTHESES

- There exists a significant difference in the mean Pretest scores between the experimental and control groups.
- No significant difference exists in the mean post-test scores between the control and experimental groups.
- No significant difference exists in the mean Pretest and mean Post-test scores of the control group.
- There exists a significant difference in the mean Pretest and mean Post-test scores of the experimental group.

## 6. METHODOLOGY

The design used for the present study is two groups- a pretest-posttest quasi-experimental study. Two intact classes of IXth standard from a government school of Aligarh District associated with Aligarh Muslim University were taken for the experiment. From the selected class (total of 80 students), the experimental (40 students) and control group (40 students) were randomly selected.

## 7. STATISTICAL TECHNIQUES USED

- T-test
- Analysis of Covariance (ANCOVA)
- Bonferroni test of post hoc comparison

## 8. RESEARCH TOOLS USED

For the present study, the investigator has employed the following research tools.

- **Achievement Test on English Grammar- Adapted from (Usha & Kader, 2017)**

The test was based on 30 objective questions on tenses. The constructor of the test obtained validity and reliability, and the coefficient of correlation obtained was 0.85.

- **Lesson Transcripts based on the Herbartian Approach**

In order to teach English grammar (Tenses) to the control group, lesson plans are based on the classic Herbartian approach, which comprises three elements: preparation, presentation, and application.

- **Lesson Transcripts Based on the Constructivist Approach**

In order to teach English grammar (Tenses) to the experimental group, Lesson plans are based on the 5Es model of the constructivist approach, which is made of engage, explore, explain, elaborate and evaluate.

## 9. ANALYSIS AND DISCUSSION

Before transacting the lesson plans and after the completion of the treatment, using the lesson plans based on the constructive approach, the researcher applied pre- and post-tests on both experimental and control groups.

### Comparing the pre-experimental status of the experimental and control group

**Table 1**

**Table 1 Comparison of the Mean Pretest Scores Between Experimental and Control Groups on the Construction of Tenses**

Area	Nature of test	Group	N	Mean	SD	't' value
Tenses	Pretest	Control	40	15.25	4.47	.408 <sup>NS</sup>
		Experimental	40	14.85	4.30	

NS not significant

As per the table, it is evident that a significant difference does not exist in the mean score of the experimental (M=14.85) and control groups' (M=15.25) Pretest on the usage of Tenses. This difference was not significant with the 't' value obtained at .408,  $p > 0.05$ .

### Comparing the effectiveness of the Constructivist Approach and the Herbatian Approach

**Table 2**

**Table 2 Comparison of the Mean Post-Test Scores Between Experimental and Control Groups on the Construction of Tenses**

Area	Nature of test	Group	N	Mean	SD	't' value
Tenses	Post-test	Control	40	16.85	4.95	-7.86**
		Experimental	40	23.83	2.63	

\*\*significant

As per the table, it is evident that a significant difference exists in the mean score of the experimental (M= 23.83) and control groups' (M=16.85) Post-test on the usage of Tenses. This difference was significant with the 't' value obtained -7.86,  $p < 0.05$ . It established that the experimental group benefitted greatly from the instruction imparted through the constructivist approach.

**Table 3**

**Table 3 Results of the Significance of the Difference in the Mean Gain Scores Between Experimental and Control Groups on the Construction of Tenses**

Area	Experimental Group			Control Group			't'- value
Tenses	N1	M1	SD1	N2	M2	SD2	-5.92**
	40	8.97	3.92	40	1.60	6.83	

\*\*significant

Table 3 shows a significant difference in the mean score of the experimental (M=8.97) and control groups' (M=1.60) gain scores on using Tenses. This difference was significant with the 't' value obtained -5.92,  $p < 0.05$ . It established that the



experimental group benefitted greatly from the instruction imparted through the constructivist approach

#### **Analysis of covariance (ANCOVA) for the achievement Test on English Grammar- Pretest scores as the covariate**

In order to measure that the differences in the scores of control variables are due to the treatment given to them and not the fact that any other factor is influencing their performances, the ANCOVA was applied using the Pretest as the covariate.

**Table 4**

**Table 4 Results of ANCOVA of the Pretest and Post-Test Scores of Achievement Test on English Grammar on the Area of Tenses- Pretest as the Covariate**

Source	Sum of squares	Df	Mean square	F	significance
Group	982.42	1	982.42	62.46	.000
Error	1210.99	77	15.72		

The ANCOVA table indicates that the covariate (Pretest scores on tenses) could not significantly influence the Post-test scores (Achievement Test on English Grammar on the select area of Tenses). As per the table, the obtained  $F(1,77) = 62.46$ ,  $p > 0.05$  indicates the effectiveness of the constructivist approach on learning tenses compared to the Herbartian Approach.

#### **Post hoc test of comparison of adjusted means between the experimental and control group**

To further find that out of the two groups, the experimental group taught through the constructivist approach and the control group through the Herbartian approach, which differs in the adjusted mean post-test scores, the Bonferroni test of post hoc comparison was used. The data and the results of the post hoc test of adjusted mean post-test scores of the Achievement test of English Grammar are presented in Table 5.

**Table 5**

**Table 5 The Result of the Test of Significance of the Difference Between Adjusted Mean Post-Test Scores of Achievement Test on English Grammar**

Dependent variable	Adjusted mean		Std. Error	t-value	Level of significance
	Experimental Group	Control Group			
Learning of Tenses	23.84	16.82	.627	-7.01**	.05

As per Table 5, it is evident that a significant difference exists in the adjusted mean score of the experimental ( $M = 23.84$ ) and control group ( $M = 16.82$ ) on the usage of Tenses. This difference was significant with the 't' value obtained at -7.01,  $p < 0.05$ . This shows that the treatment given through the constructivist approach was helpful for students in learning tenses.

## **10. DISCUSSION WITH MAJOR FINDINGS**

The results of the data analysis (Table 6) shed light on the fact that the treatment given to students through the constructivist approach proved to be very helpful in learning grammatical structures (tenses) in secondary school students.

**Table 6**

<b>Table 6 Major findings of the study</b>	
<b>Hypotheses</b>	<b>Status</b>
1. There exists a significant difference in the mean Pretest scores between the experimental and control groups.	Rejected
2. No significant difference exists in the mean post-test scores between the control and experimental groups.	Rejected
3. No significant difference exists in the mean Pretest and mean Post-test scores of the control group.	Rejected
4. There exists a significant difference in the mean Pretest and mean Post-test scores of the experimental group.	Accepted

It is observed that employing constructivist teaching approaches results in heightened student involvement and enhanced comprehension of subjects. A similar study was conducted by Kim (2005), which discussed the effects of a constructivist approach on academic achievement, self-concept, and learning strategies. The experimental group was taught maths using the constructivist approach, while the control group was taught using the traditional approach. The results revealed that constructivist teaching is more effective than traditional teaching in terms of academic achievement; it positively affects motivation, anxiety toward learning, and self-monitoring, and a constructivist environment is preferred over a traditional classroom. In a study by Kumar Shah (2019), the researcher suggested that the constructivist approach is an effective professional process that impacts daily and future teaching and elicits change.

## 11. CONCLUSION

Building on constructivist teaching in teacher education programs and schools countrywide is a mixed blessing. The increased use of constructivist pedagogies is good because it shows that more teachers and schools are moving away from traditional teaching models, which often did not challenge students to construct their understanding of the content and did not meet the needs of many students (Majumder, 2024). The result of this study suggests that the constructivist pedagogy is an effective pedagogy to teach grammatical structure (Tenses). It is also shown that this pedagogy is better than the herbarian approach in teaching the learning process of English grammar. Constructivist pedagogy fosters continuous active engagement. Students participate in collaborative and cooperative groups, promoting social interaction and cognitive involvement.

Research (Majumder, 2024; Pandya, 2015; Suhendi & Purwarno, 2018; Sulistyowati, 2019; Szabó & Csépes, 2022) support the link between constructivist teaching and better academic performance. Students who actively construct their understanding of grammar concepts tend to retain knowledge more effectively. Constructivism in teacher education programs embraces open-mindedness, ambiguity, flexibility, and inventive thinking, essential for adapting to emerging research and continuous development (Kaufman, 2004). Constructivist teachers engage pupils and deepen their understanding. The ubiquity of constructivist teaching approaches shows that educators must be more careful about what constructivism means and how we use it. We must not mix constructivism with student-centred education or believe constructivist teachers lack content knowledge. Furthermore, constructivist teachers must resist reducing learning to entertainment or asking students to teach themselves. Teachers, educational theorists, and educators should remember that constructivism, like any good



teaching and learning approach, is not a cure-all for educational problems. Constructivist teaching can be quite effective when utilised correctly, but when misapplied, it might fail. (Kumar Shah, 2019).

## 12. LESSON PLAN ACCORDING TO THE CONSTRUCTIVIST APPROACH

The researcher planned the English grammar lessons from the NCERT textbook of English (Beehive) NCERT of the ninth standard, following the 5Es model of the constructivist approach. The steps of the model are mentioned below.

Components	Description	Activity
<b>Engagement</b>	Captures the students' attention, stimulates their thinking, and helps them access prior knowledge. This step helps learners bring past experiences and cultural factors to construct new knowledge, resulting in different interpretations and constructions based on mental representations. Students gradually understand the lesson's objective.	The class begins by using an inductive technique to assess students' background knowledge in grammar. The grammatical structure to be focused on in the class is past continuous tense. Therefore, the pre-thinking activity involves discussion questions (in large groups) in the present continuous tense. Students were engaged in the lesson by using picture cues and matching sentences to pictures. They were also encouraged to speak statements in the present continuous tense so that the awareness about the continuous tense rules, such as using -ing-, is known to students.
<b>Exploration</b>	It gives students time to think, plan, investigate and organise collected information. In this step, hands/mind-on activities are done to explore the objective of that particular lesson. Students are encouraged to explore, investigate, and inquire.	The students read the text, and students are compelled to highlight the tense or such words and sentences matching the pre-activity. Activities such as shuffle storylines, text manipulation, and imitation are done at this step to draw students' attention to the structure of sentences.
<b>Explanation</b>	Involves students in an analysis of their explorations. Reflective activities clarifying and modifying their understanding are done here. Students' understanding developed at the exploration step is discussed.	At this step, students are asked to explain the process they have adopted to reach the understanding. Activities such as open-ended questions, games, recreational activities, role-playing, retrieving text order, writing dialogues and comments, peer interaction, and content-based activities elicit students' understanding. Teachers assist students in solidifying their conceptual knowledge as well as their content knowledge.
<b>Elaboration</b>	Facilitates the development and consolidation of students' comprehension of the subject matter through its practical application.	After successfully constructing the knowledge of tenses, students can understand the rules underlying past continuous tenses. They are asked to write a paragraph about any situation using past continuous tense.
<b>Evaluation</b>	Students present their understanding of the lesson objective, and an assessment is conducted by either their peers or the instructor.	In order to do the assessment, the written assignment was peer evaluated so that the students could help each other understand the mistakes and, at the same time, learn from their peers. The teacher's task was to be a guide and supervising body in helping students in this evaluation process.

## CONFLICT OF INTERESTS

None.

## ACKNOWLEDGMENTS

None.

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