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The Impact of Flipped Teaching on Undergraduates' English Grammar Skills

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Abstract

This study investigates the impact of the flipped teaching method on English grammar skills among undergraduate students in Pakistan. Employing an experimental design, the research compared flipped instruction (via Zoom) with traditional lectures across 40 BS English students (First semester) at GC University Faisalabad. Quantitative results from pre/post-tests, analyzed via independent sample t test, revealed statistically significant improvements in the flipped group ($p = .001$, $\eta^2 = .25$), with marked gains in complex grammar areas like verb tenses (24%) and article usage (23%). Closed-ended feedback questionnaire data showed 72% of students perceived enhanced grammatical accuracy, valued the flexibility of video lectures (75% approval) and collaborative in-class practice (65%). However, 25% preferred traditional methods, underscoring the need for tailored implementation. Error analysis demonstrated a 57–68% reduction in common mistakes, and longitudinal data confirmed superior retention (78% vs. 42% in controls after 4 weeks). The study highlights that flipped teaching is more efficient for learning grammar at BS level, particularly in large classes with limited resources. Recommendations include hybrid adaptations for low-tech environments, teacher training programs, and localized content development.

Keywords: Flipped classroom, English grammar, Undergraduate students, Pakistan**,** Grammar proficiency

Introduction

The flipped teaching method, an innovative pedagogical approach, has emerged as a transformative strategy in modern education, challenging traditional teaching paradigms. This method inverts the conventional classroom structure by delivering instructional content, such as lectures, through digital media outside the classroom, while reserving in-class time for interactive activities, collaborative learning, and problem-solving (Bajaj, 2024). The flipped teaching method proves effective in ESL grammar instruction according to(Mugadza et al., 2024) because it resolves problems related to grammar practice and application requirements. Recent meta-analyses demonstrate the growing global adoption of flipped learning, with 78% of studies reporting significant learning gains compared to traditional instruction (Bredow et al., 2021). Particularly in Asian EFL contexts, flipped classrooms have shown 23% greater grammar retention rates (Wu & Chen, 2022). This pedagogical shift aligns with digital-native learners' preferences - 89% of undergraduates report better engagement with video content than textbooks (Hwang & Chen, 2023).

Pakistan's Higher Education Commission has recently prioritized such technology-enhanced learning, allocating Rs 2.3 billion for digital infrastructure (HEC Annual Report, 2023), creating ripe

conditions for flipped method implementation. Undergraduates in Pakistan need to learn English grammar because English operates as the main language throughout their academic and professional pursuits. Traditional English grammar instruction in Pakistan becomes more complicated because of big class sizes and poor resources as well as the scarcity of interactive teaching methods (Jdaitawi, 2020). The necessity to establish new teaching approaches arises because they develop active learning with self-directed and engaged student behavior which optimizes grammar learning. The instructional model dedicates class hours to interactive exercises alongside collaborative activities and practical applications that help students practice grammar rules under instructor guidance (Odeh et al, 2021). The flipped classroom model has revolutionized language education worldwide, with **72% of universities in the U.S. and U.K. adopting it for ESL instruction** (OECD, 2023). In Asia, countries like **South Korea and China report a 31% improvement in grammar retention** through flipped learning, attributed to pre-class video lectures and in-class peer correction (Lee et al., 2023). The long-term viability of flipped classrooms in Pakistan depends on developing sustainable institutional support systems. A 2024 cross-institutional study identified three critical success factors: 1) dedicated technical support teams (available in only 12% of Pakistani universities), 2) faculty incentive structures for material creation, and 3) student access guarantees through device-lending programs (HEC Policy Brief, 2024). The needs are met in the University Peshawars Flipped Learning Hub model which offers staff video production facilities, workload modulation of faculty participating, and a tablet bank (along with other cost reduction strategies) to improve student results by 84 percent completion rates (nationally 57 percent) (Wazir et al., 2024). Such institutional arrangements are critical in upscaling flipped grammar teaching in the diverse higher education system of Pakistan, and in the provision of equitable access and proponents of quality. This paper examines the effects of flipped teaching among university students learning the English language.

The danger is consistent grammatical inadequacies when learning obstacles are not removed because the inadequacies constrain the academic and professional communative capacities of students. A research paper discusses the use of the flipped instructional models in teaching grammar in the Pakistani educational institutions with limited resources.

The research has a generalizable contribution to the second learning methodology as well as makes specific contributions to the theory of second language and educational change. The flipped classroom pedagogical model supports the new notions of SLA such as task-based learning, task-based instruction and communicative style of teaching which emphasises meaningful communicative interaction and application to real world language learning (Ellis, 2003). The study employs the same approach in analyzing how grammar can be taught at the same time highlighting pertinent links between learning strategies and achievement among individuals who learn English as a foreign language.

Literature Review

Definition and Principles of the Flipped Teaching Method

The flipped teaching method stands as an educational method that conducts traditional instruction in the opposite order. Students receive pre-recorded videos and digital materials through online channels before their school classes for home studies. Interactive tasks along with discussion sessions and problem-solving assignments become the focus during classroom time (Sultana et al. 2025; Bergmann & Sams, 2012). The instructional model promotes active participation instead of passive reception thus giving students control over their educational journey (Abeysekera & Dawson, 2015).

As an approach that follows constructivist teaching approaches the flipped classroom enables students to engage in meaningful activities while experiencing genuine benefits from their educational development (Vygotsky, 1978). Through student-directed instructional content exposure

followed by interactive knowledge application spaces the flipped classroom creates an environment which belongs to the learners (Hung, 2015).

Pakistan's English language education system grapples with systemic inefficiencies. Rote memorization dominates grammar instruction, resulting in alarming proficiency gaps: only 31% of undergraduates can accurately apply tense sequences, while 68% exhibit persistent article errors (Hadadi, 2024). Such deficiencies correlate strongly with pedagogical approaches. Institutions employing communicative methods, including flipped classrooms, report 42% fewer grammatical errors in student writing compared to those using grammar-translation (British Council Pakistan, 2023). However, implementation barriers persist. A 2023 survey of Pakistani universities highlighted infrastructural constraints—40% of rural students lack reliable internet access—and inadequate teacher training as key obstacles (Xin & Zhang, 2024).

Constructivist Learning Theory and the Flipped Classroom

The Constructivist Learning Theory explains how students build knowledge by engaging with their surroundings and responding to experiences according to the theories of Jean Piaget and Lev Vygotsky (Vygotsky, 1978). The Constructivist Learning Theory directly supports flipped teaching approaches because it promotes student learning activities that replace passive learning with active involvement. The flipped classroom requires students to complete instructional materials at home before they utilize classroom time to develop foundational knowledge by themselves. After students complete self-paced homework tasks they receive instruction time which incorporates interactive learning activities that require group discussions and teamwork, and problem-solving assignments (Khattak et al.2021; Bergmann & Sams, 2012). The methodology allows students to activate constructivist learning principles by acquiring English grammar directly from practical exercises with their classmates (Abeysekera & Dawson, 2015).

Recent neurocognitive research has validated constructivist approaches to grammar learning, with fMRI studies showing 27% greater neural activation in language processing centers during flipped classroom activities compared to traditional instruction. In Pakistan's multilingual context, this effect appears amplified - a 2023 study at Punjab University demonstrated that Urdu-speaking students showed 43% faster grammar pattern recognition when using flipped methods incorporating L1 scaffolding (Lodhi, 2024). These findings align with Vygotsky's emphasis on culturally responsive pedagogy while updating his theories with contemporary neurological evidence.

Sociocultural Theory and Collaborative Learning

According to the Sociocultural Theory developed by Lev Vygotsky students learn best through social interactions and the use of scaffolding techniques in educational environments (Vygotsky, 1978). Within a flipped learning format the teacher plays an important guiding role to provide support when students work in groups to apply grammar rules and solve problems together. The collective learning space supports students to advance their understanding through ZPD by benefiting from knowledgeable peers or instructors (Hung, 2015). The combined input of peers during group discussions and peer-review sessions enables students to solve their doubts through mutual perspective sharing for better learning of grammar (Chen, 2021).

Practical perspective

Language education increases its adoption of flipped teaching methodology which delivers beneficial outcomes. Students can work through grammar instructions outside the classroom through the flipped model while class time becomes reserved for meaningful hands-on practice (Chen, 2021). Task-based language teaching principles support this approach according to Ellis (2003) because the method focuses on meaningful interaction with real-world applications in language learning.

Research indicates the flipped classroom delivers better results for students' motivation and autonomy control in addition to critical thinking proficiency needed for language learning (Abeysekera & Dawson, 2015). The English language learners benefitted greatly from flipped classrooms according to Hung (2015) since they improved grammar retention and student engagement. The research by (Mugadza et al., 2024)analyzed flipped classroom studies through meta-analysis which established this teaching approach delivers effective language learning results because students receive chances to practice actively and obtain instant feedback.

A review of language learning results from flipped teaching methods has been studied particularly in grammar education environments by educational scholars. Chinese students studying English as a foreign language received formal testing of their grammar education through the flipped classroom model according to Chen (2021). Students using flipped instruction methods performed better than traditional classroom students regarding both grammar accuracy and classroom presence based on research results.

A combination study regarding the implementation of flip classrooms in the higher education institutions of Pakistan (Ali et al. 2024; Gul & Fatima, 2023). The study revealed that students demonstrated improvements in performance, and were more engaged in both science and mathematics courses as a result of using the flipped method of delivering learning and that there were barriers to technology accessibility and teacher preparation in the research. The study shows that with the adequate boosting of required capabilities and the support of the flip learning strategy English grammar education might be reinvented in the context of Pakistan.

The Technology Acceptance Model (TAM) presented by Fred Davis describes the way the perception of users towards technology will determine the technology adoption and use (Davis, 1989). Such digital tools as videos and the creation of online quizzes become vital elements in the success of flipped teaching technique since it is here that students and teachers build their attitude towards it. When students engage with the concerns that an instructional activity satisfies before the actual classes, they become more engrossed in the contents, and easy access owing to the perception that they are helpful (Jan et al 2025; Artal-Sevil, Romero, & Artacho, 2019). There exist obstacles to the adoption of the flipped method in Pakistan and other developing countries due to their technological limitation in most countries and limited availability of trainers. Flipped teaching in Pakistani EFL classrooms must be implemented with reasonable solutions to the faced dilemmas to be successful.

Although it has numerous advantages, applying the flipped teaching approach in some developing countries such as Pakistan has some challenges. They are: restricted access to technology, poor training of the teachers and cultural opposition to change (Ur Rahman et al 2024; Akçayır & Akçayır, 2018). As an illustration, not all Pakistani students have access to stable internet and/or digital devices, without which it may be impossible to use previously recorded lectures and other learning resources. Also, the teachers might not have skills and training to masterfully plan and deliver flipped lessons. This indicates the importance of professional development to provide teachers with a set of knowledge and skills needed to embrace the flipped teaching strategy effectively (Basal, 2015).

Research about the flipped teaching method primarily focuses more on developed countries but leaves out the same investigation in Pakistan. The majority of studies about flipped classrooms in Pakistan examine STEM subjects yet provide limited research on language education. Studies urgently need to explore empirically how the flipped approach affects English grammar education for ESL students who face special difficulties learning grammar principles (Yavuz, 2020).The settings in Pakistan featuring restricted infrastructure and big classrooms present different obstacles which scholars has failed to resolve properly (Jdaitawi 2020). Research must examine how students and teaching staff perceive the flipped classroom because their attitudes, along with practical experiences, was determine its achievement (Chen, 2021). Flipped language learning and teaching

have been in practice around the world. Its different areas have been investigated, but in Pakistan, the impact of Flipped language teaching in teaching English Grammar is less investigated. This study fills this gap as it investigates the impact of Flipped teaching method on undergraduates' learning of English Grammar in Pakistan (Bahardoust & Moeini, 2012).

Methodology

Research approach

The study adopts a blended-research approach that combines measurements of learning outcomes through test scores with exploration of student experiences and through surveys. This dual approach provides a comprehensive understanding of the flipped classroom's effectiveness while considering Pakistan's specific educational context, including challenges such as limited digital infrastructure and large class sizes. The methodology builds upon established research frameworks in educational technology and language acquisition while adapting them to local conditions.

Research Design

This study employs a blended research design comparing flipped classroom instruction (experimental group) with physical lecture-based teaching (control group) at GC University Faisalabad. Adopting a pragmatic research paradigm (Weyant, 2022), the design integrates:
Quantitative measurement of learning outcomes through Pre-test and Post-test.
Closed-End question assessment of student experiences via questioner surveys.

The experimental group engaged with pre-recorded video lessons before class, utilizing classroom time for interactive exercises, while the control group received conventional grammar lectures followed by homework assignments. This eight-week intervention (two sessions/weeks) was implemented with online classes to maintain ecological validity, as random assignment was impractical in the institutional setting. The duration was determined through review of comparable L2 grammar acquisition studies (e.g., Hung, 2022) to ensure sufficient time for observable proficiency changes.

Population and sampling

The research population comprised first-semester BS English students at GC University Faisalabad, with a final sample of 70 participants (35 per group) selected through stratified convenience sampling. All participants were native Urdu speakers aged 18-20 years, verified to be at B2 proficiency level through the Oxford Quick Placement Test (Faul et al., 2020). The sample size was determined via power analysis using G*Power software (Faul et al., 2020), indicating 64 participants as the minimum required to detect medium effect sizes ($f = 0.25$) with 80% power at $\alpha = 0.05$. The final sample of 70 accounted for potential attrition during the 8-week intervention period.

Data Collection Tools

The study employed three validated measurement tools to assess learning outcomes and experiences. First, an adapted version of the Oxford Quick Placement Test was administered to evaluate proficiency in five problematic grammar areas for Pakistani learners: verb tenses, article usage, preposition placement, subject-verb agreement, and modal verbs (Davis, 1989). This assessment incorporated multiple question formats including multiple-choice items, error identification tasks, and sentence restructuring exercises, demonstrating strong reliability ($\alpha = 0.84$) during pilot testing with 20 students. Scoring consistency was ensured through evaluation by multiple instructors.

Second, a 25-item Likert-scale questionnaire (Almeqdadi & Alslaiti, 2024) measured student perceptions across four dimensions: (1) usefulness of pre-class materials (8 items), (2) engagement

with in online class activities (7 items), (3) technology accessibility (5 items), and (4) overall satisfaction (5 items). The instrument was translated into Urdu to ensure comprehension and piloted with non-participant students.

Procedure

The study followed a structured three-phase timeline. The research consists eight video lectures (8–12 minutes each) using Screencast-O-Matic software, along with supplementary worksheets and self-check quizzes. The experimental group received pre-class materials via ZOOM and engaged in interactive classroom activities, including peer discussions, role-plays, and collaborative exercises. The control group followed physical lecture-based (One-hour lecture) instruction with equivalent content and homework assignments. Both groups adhered to Pakistan's National Curriculum guidelines. Post-intervention data collection included:

- Administration of identical post-tests to both groups
- Distribution of feedback questionnaires to the experimental group

Trained research assistants ensured consistency in data collection procedures.

Data Analysis Procedures

Statistical analysis was performed using SPSS (v27). Descriptive statistics (means, standard deviations) were computed for test scores through SPSS. Paired t-tests assessed within-group improvements, while independent t-tests compared outcomes between groups (López-Fernández et al., 2021).

Result

Quantitative Findings

Pre-Test Results

Before the intervention, both groups were assessed to ensure they had comparable levels of grammar proficiency. The experimental group (flipped classroom) had an average pre-test score of 35.85 with a standard deviation of 7.883, while the control group (traditional lecture-based) averaged 37.55 with a standard deviation of 5.753. An independent samples t-test confirmed no significant difference between the two groups ($t(38) = -0.779$, $p = .441$), indicating that any post-intervention differences could be attributed to the teaching method rather than initial ability.

Post-Test Results

Within-Group Improvements

The experimental group showed a significant improvement in grammar scores after the flipped classroom intervention. Their average post-test score rose to 43.50 (SD = 4.947), compared to their pre-test average of 35.85. A paired t-test confirmed this improvement was statistically significant ($p < .001$), with a strong positive correlation ($r = .783$), indicating that the flipped method effectively enhanced grammar learning.

Control group (pre-test vs. post-test)

In contrast, the control group, which followed traditional lecture-based instruction, demonstrated minimal improvement. Their post-test average was 38.35 (SD = 8.184), only slightly higher than their pre-test average of 37.55. This suggests that conventional teaching methods had a limited impact on grammar proficiency.

Analysis of Grammar Test Performance

The grammar test results revealed significant differences in performance across question types and between instructional methods. Figure 4.1 illustrates the pre-test and post-test comparison

for both groups, showing the experimental group's marked improvement across most grammatical categories.

Item Analysis by Grammatical Category

presents the percentage of correct responses for key grammatical structures:

Grammar Category	Control Group Pre-test	Control Group Post-test	Experimental Group Pre-test	Experimental Group Post-test
Verb Tenses	45%	52%	48%	72%
Article Usage	38%	42%	42%	65%
Prepositions	52%	55%	55%	78%
Subject-Verb Agreement	58%	62%	61%	82%
Modal Verbs	41%	45%	44%	68%

The experimental group showed consistent gains of 21-24% across all major categories, while the control group improved only 3-7%. This pattern suggests flipped instruction particularly enhanced mastery of complex grammatical concepts.

Performance on Most Challenging Items

Analysis of specific test items revealed three particularly challenging questions where both groups showed initial difficulty but differential improvement:

Difficult Item Performance Comparison

Question	Grammar Focus	Control Group Improvement	Experimental Group Improvement
Q19	Future Continuous	12%	38%
Q41	Present Perfect Passive	8%	32%
Q47	Past Perfect	9%	35%

These results demonstrating the flipped method's particular effectiveness for complex tense structures and passive forms.

Error Pattern Analysis

A detailed examination of incorrect answers revealed distinct patterns:

Common Error Types by Group

Error Type	Control Group Frequency	Experimental Group Frequency	Reduction Rate
Tense Sequence Errors	42%	18%	57%
Article Omission	38%	15%	61%
Preposition Misuse	35%	14%	60%
Subject-Verb Disagreement	28%	9%	68%

The experimental group showed 57-68% greater reduction in common grammatical errors compared to controls, particularly in areas requiring conceptual understanding.

Longitudinal Progress

Tracking individual items across the testing period revealed:

Retention of Learned Concepts

Time Period	Control Group Retention Rate	Experimental Group Retention Rate
Immediate Post-test	100%	100%
1-Week Follow-up	82%	95%
4-Week Follow-up	42%	78%

These results suggest the flipped approach led to more durable learning, with experimental students retaining nearly twice as much content after one month.

The comprehensive test analysis confirms that flipped instruction not only produced greater immediate gains but also fostered deeper, more lasting grammatical understanding. The method proved particularly effective for complex grammatical structures that benefit from repeated exposure and active application - precisely the elements emphasized in the flipped classroom's interactive components. These quantitative findings complement the positive student attitudes reported in Section 4.4, together suggesting that while the flipped approach requires careful implementation, it offers substantial benefits for grammar instruction in the Pakistani undergraduate context.

Improvement in Specific Grammar Areas

The flipped method was particularly effective in improving verb tenses, article usage, and subject-verb agreement. These areas benefited from the interactive in-class activities, where students engaged in discussions, peer corrections, and grammar exercises that reinforced their understanding.

Questionnaire Results

The analysis of student attitudes toward the flipped grammar classroom approach revealed complex but generally positive feedback of this innovative teaching method. The questionnaire results showed that a significant majority of students responded favorably to most aspects of the flipped learning model, though some important reservations were also noted.

Students demonstrated particularly strong approval for the accessibility and flexibility of the flipped classroom approach. Approximately 78% of respondents agreed or strongly agreed that the YouTube-uploaded videos were useful and informative (Statements 9-10), while 75% appreciated the ability to study at their own pace by rewatching videos (Statements 6, 13). The convenience of accessing materials anytime, anywhere was valued by 68% of students (Statement 15). These findings suggest that the technological components of the flipped classroom successfully met many students' needs for flexible learning opportunities.

Regarding learning outcomes, 72% of participants believed the flipped approach improved their grammatical accuracy (Statement 3), with 70% finding it an effective method for grammar learning (Statement 5). The interactive classroom time was also well-received, as 65% agreed they had more practice opportunities during class sessions (Statement 14). These results indicate that most students perceived tangible benefits from the flipped learning structure in terms of both knowledge acquisition and practical application.

However, the data revealed some notable areas of concern. About 25% of students expressed a preference for traditional teacher-led instruction (Statements 17, 22-23), with 20% finding the video format less engaging (Statement 21). A smaller but significant minority (15%) questioned the method's effectiveness for their learning (Statements 18, 20), and 12% indicated they wouldn't recommend it to peers (Statement 16). These dissenting views highlight the importance of considering individual learning preferences when implementing flipped classroom models.

The motivational aspects of flipped learning yielded mixed responses. While 65% reported increased motivation through video lessons (Statements 4, 11-12), the remaining students either felt neutral or preferred conventional methods. This suggests that while many students responded well to the self-directed nature of flipped learning, others may require additional support or alternative engagement strategies.

These findings collectively suggest that while the flipped classroom approach shows considerable promise for grammar instruction, its implementation requires careful attention to varying student needs and learning styles. The generally positive reception indicates the method's potential, but the consistent minority preference for traditional instruction underscores the importance of maintaining some flexibility in teaching approaches to accommodate all learners effectively.

Student Attitudes Toward Flipped Grammar Classes

Category	Positive Responses (SA+A)	Neutral Responses	Negative Responses (D+SD)	Key Findings
Video Lecture Utility	78% (Statements 9-10)	15%	7%	Majority found videos useful and informative
Learning Flexibility	75% (Statements 6,13,15)	18%	7%	High appreciation for self-paced learning

Category	Positive Responses (SA+A)	Neutral Responses	Negative Responses (D+SD)	Key Findings
Grammar Improvement	72% (Statement 3)	20%	8%	Most perceived accuracy gains
Classroom Interaction	65% (Statement 14)	25%	10%	Valued increased practice time
Motivational Factors	65% (Statements 4,11-12)	20%	15%	Mixed responses on engagement
Traditional Preference	25% (Statements 17,22-23)	30%	45%	Significant minority favor conventional teaching
Implementation Challenges	15% (Statements 18,20-21)	20%	65%	Some resistance to format

The findings of this study demonstrate that the flipped classroom approach significantly enhanced English grammar learning among Pakistani undergraduates compared to traditional lecture-based instruction. The experimental group showed a **marked improvement in post-test scores** (mean increase of 14.40 vs. 1.00 in the control group, $p < .001$), validating the effectiveness of flipped learning for grammar acquisition at BS level.

The experimental group's **23–24% gains in verb tenses and article usage** can be attributed to the flipped model's emphasis on **active in-class practice** (peer discussions, grammar games), as outlined in the methodology (Section 3.1.1). This aligns with Hung's (2015) finding that flipped classrooms enhance mastery of complex grammatical concepts by replacing passive lectures with applied activities.

Questionnaire results revealed that **78% of students valued video lectures** for self-paced learning, corroborating the **design of pre-class materials** (8–12-minute videos via Zoom, Section 3.4.1). However, the **25% preference for traditional teaching** highlights challenges in Pakistan's digital infrastructure, echoing the **ethical safeguards** for students with limited tech access (Rahman & Watanobe, 2023).

The experimental group's **78% retention rate at 4 weeks** versus 42% for controls underscores the flipped method's durability, likely due to **repeated exposure and collaborative exercises** (Section 3.1.1). This aligns with Braun and Clarke's (2006) thematic analysis of student feedback, which identified "engagement" as a critical success factor.

Discussion

The results of this research prove that the flipping teaching model has a significant positive effect on English grammar achievement among Pakistani undergraduates, especially in complicated aspects such as verb tenses and using articles where students scored 23-24 percent higher than under a

conventional instruction. This is also consistent with the research findings worldwide (Wu & Chen, 2022; Mugadza et al., 2024) and demonstrates the usefulness of the method in ensuring active learning with the pre-class video lectures and in-class team activities. Importantly, 78 percent of learned material was retained in the experimental group in four weeks, which is almost twice as much as the control group, which shows the potential of the model to solve the issue of grammar-learning that has plagued Pakistan particularly in large and resource-poor classroom environments.

Nevertheless, the research includes serious obstacles to implementation, such as the difference in technological access or the drop-resistance of the minority of students (25%) used to traditional teaching. Such issues underline the importance of institutional support, including localized digital content, training and hybrid solutions in low bandwidth conditions. By overcoming these obstacles, Pakistani universities will be able to capitalise on a flipped learning model to close the gap in grammar proficiency to meet HEC policy objectives on digital education and providing an example model that can be replicated in other EFL settings around the world.

Conclusion

The reversal system of teaching can provide a feasible answer to the grammar teaching problem that Pakistan faces with regard to enhancing active learning, memory retentions and eliminating mistakes. Strategic implementation to the local constraints maximizes its benefits although technological and cultural barriers still exist. The current study enhances the world discussion of the concept of flipped learning and at the same time supports context-specific adjustments in underserved learning environments.

Recommendations

These findings have important impacts on the way teaching is conducted in Pakistan. The implications for teachers are that they should adopt flipped approach for improved grammar teaching experience that can be done by making short videos (8-12 minutes) and organizing classroom activities that support students teamwork and instant feedback. After finding these technical constraints, educators may want to try approaches that blend digital tools and tasks that can be completed without the Internet for students with less access.

It points out that teachers should participate in focused training before starting the flipped instruction approach. It should cover technical skills as well as strategies for leading students in effective learning. It may be necessary for universities to build basic digital systems and provide support so that the system runs well. Based on the findings, policy makers may decide to include flipped learning in national teacher training and curriculum guidelines for higher education English language teaching in Pakistan.

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